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The Organization of Power in the Dominican Tobacco Eco-Market System

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LOYOLA UNIVERSITY OF CHICAGO

THE ORGANIZATION OF POWER
IN THE DOMINICAN TOBACCO ECO-MARKET SYSTEM

Fernando I. Ferran

May 11, 1973

TO THE
DOMINICAN PEOPLE

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PREFACE

The present study has three main goals. The first is to contribute to the anthropological building of a model of the technoeconomic organization of industrial complex societies. The second is to understand the role of the social organization of power in these societies. Finally, beyond all academic purposes, we wish to pay tribute to those men who suffer the consequences of the asymmetrical exercise of power in present day societies around the world, and especially in Latin American and the Dominican Republic. Hopefully, by achieving the first two objectives, their organizations might change their present status of social, political and economic dependence.

Anthropological work in social units other than the primitive isolate requires general and comprehensive models not yet in existence. Starting from simple beginnings in the twenties, anthropologists have grown increasingly worried by the presence of "civilizations", "nations", "complex and urban societies", and "cities" (cf. Kusher 1969). First they studied "isolated" cultural systems, for instance a local community, taking into account its large cultural matrix. Later they described "outside factors" which affected the assumed isolated cultural system. With Steward's (1955) recognition of "levels of sociocultural integration" and "national sociocultural systems", anthropology has come to recognize that nations or systems of the higher level do not consist merely of more numerous and diversified parts. Therefore, it would be methodologically incorrect to treat each social unit as though it were an independent system in itself.

Probably guided by Redfield's question about the structural differences

between the primitive isolate and greater systems some anthropologists came to conclude that national institutions are so complex that even small competence in their operations seems to require specialization. The analysis of these national institutions, then, have been left open for study by specialists in other disciplines. Nevertheless, economic, political and legal variables in industrial societies are not closed systems. They are integrated into a sociocultural system. Thus other social scientists have discovered that they must pay attention to shifting group relationships and their adaptational activities if their studies are to reflect this cultural dimension of institutional "reality". As Wolf reminded us (1956:1066)

institutions are ultimately but cultural patterns for group relationships. Their complex forms allow groups to relate themselves to each other in the multiple processes of conflict and accommodation which must characterize any complex society. They furnish the forms through which some nation-oriented groups may manipulate other nation-oriented or community oriented groups.

In the anthropological literature the constant object of study has normally been not the "whole social system" as a unit but groups of people. In other words, we have limited ourselves to segmental analysis of cultural systems in most cases. The problem of how these supplementary groups and the structures resulting from their operations are articulated is normally presented amid the increasing interest with complex sociocultural systems. The issue, however, is hardly resolved. Even such studies as Steward's in Puerto Rico (1956) does not adequately face this problem. In it, we are presented with an analysis of the adaptational operations of social units selected for study because patterns of land use or operational roles, but how these groups of peasants and prestigious families are linked to the national sphere is not analyzed. In addition, it is difficult even to imagine what the "national sphere" is.

In this situation, one starts suspecting with Schneider (1961:215) that

although complex societies is an in-problem in anthropology, "the treatment generally accorded "complexity" today consists mainly in simply referring to "complexity" and then ignoring the matter. The fundamental problem is that of dealing with the range of different kinds of societies within the framework of a theory of society".

In the last decade a number of studies have faced this problem. For instance, Mitchell (1966) struggles with the basic conception of the town or city and the extent to which either can be viewed as a single social system. He seems to be saying that a city can best be viewed as a set of overlapping social fields rather than one of inter-locking institutions, structures, norms, or other values. In 1961 (cf. 1969), Epstein distinguished between effective and extended networks within the urban social organization. And Plotnicov's study of Jos, Nigeria (1967) uses situational analysis as derived from Mitchell, Epstein and Gluckman to deal with urban behavior and adaptation. He takes significant areas of social interaction and observes the development of standards of behavior appropriate to the social environment in which they occur.

These works study social units of operation within contemporary industrial societies. They tend to indicate that kinship networks are virtually assimilated within more inclusive societywide social networks. In addition, they offer valuable insights and descriptions into the social networks studied. These descriptions and analyses of the "supplimentary interpersonal sets... not only reveal a great deal about the hidden mechanisms of complex society... (but) also reveal much of the social dynamic, of the changing distribution of forces in the social body... (and) indicate the way in which the parallelogram of social forms in one society differ from that of another" (Wolf 1966 b:20).

The scope of research of these studies, however, has to be augmented beyond the social structure of industrial complex societies in order to provide us with a model of these societies and their cultural systems. If not, like

In recent studies on the "culture of poverty" and urban ethnic ghettos, these social networks might be understood as isolated, self-originated, and self-perpetuating groups with a distinctive sub-culture (see Valentine 1968).

Two main reasons account for the need of a wider scope of research and for the elaboration of models of complexity. First of all, a theoretical position of cultural materialism: the explanation for cultural differences and similarities is to be found in the technoeconomic processes responsible for the survival of the material requirements of biosocial survival. In other words, the technoeconomic parameters of sociocultural systems exert selective pressures in favor of certain types of organizational structures and upon the survival and spread of definite types of ideological complexes.

In principle, therefore, all of the major problems of sociocultural differences and similarities can be solved by identifying the precise nature of these selective parameters. Nonetheless, as a general principle, it does not commit itself to the explanation of any specific sociocultural type or any specific set of institutions. It goes without saying, that this is not to argue for an absolute unconditional one to one effect upon the cultural forms and functions growing out from the technoeconomic organization. This would ignore the actual interaction of the technoeconomic organization with social structures, ideologies, and personality configurations in the social system. But only a recognition of causal priority in conformity with the prediction that group structure and ideology are responsive to the interaction between behavior and environment as mediated by the human organism and its cultural system.

The second reason justifying wider scope of research lies behind Polanyi's (1944) The Great Transformation. The social structure of industrial complex societies is presently subjected to the virtual dominant influence of a market economy. In the market place every cultural object is priced

including such non-commodities as land, human labor and money. Thus social security disappears and competition and individualism reinforce their presence in the human group. Through this technoeconomic organization we all find ourselves playing in the market place and even exposing ourselves (labor) as a commodity for a price (wage). Where the market economy exists, it appears to be the main, although obviously not the only one, institution perpetuating and articulating the links among social units in the society, and even between the societies themselves. As Jules Henry (1966:97) recently acknowledged while presenting some theoretical considerations for the study of the United States culture: "The economic system has certain consequences for personality... The consequences and the emergent personality traits can be detected in all phases of culture".

In this perspective White's civil societies (1959:296 ss.) has to be reconsidered from its original formulation as transformation of interpersonal relations and the state-church as an integrative mechanism. Instead, industrial complex societies appear as sociocultural systems transforming energy resources according to a structural pattern of a market economy regardless of interpersonal relations.

In dealing with social networks or group relationships in a market economy, we cannot neglect the fact that the exercise of power by some social units over others is present on all levels of articulation. Certain economic and political relationships are crucial to the functioning of any industrial complex society. Regardless of what other functions such a society may perform, its integrating units must both produce surpluses and exercise power to transfer a part of these surpluses from the producing units to manufacturing, distributing and consuming units. This means that all interpersonal and intergroup relationships in industrial complex societies (or all complex societies?) must at some point establish and conform to power transactions.

The determinant influence of power in industrial complex societies has been well emphasized by Adams and his associates (1970). By using a framework of power structure, they study the relationship that integrated the Guatemalan peasant into the nation. In their study, power appears as a feature of every social relationship spreading its effect differentially through the entire society. Once society itself is understood as a system articulated through power networks, social development itself is evolution:

If development is in some sense growth and expansion, what is the connection between it and evolution, that theoretical area of anthropology that has usually been concerned with growth and expansion?... The answer that emerged was that development was itself, in a sense, evolution. It comprised that aspect of evolution having to do with the build-up of goods and human time usage, the expansion or growth of the material and economic side of life. More than this, however, with the concept of power in hand, it was not merely that technology and economics related development to a larger evolutionary framework, but that their concerns were part of a more inclusive subject matter. This, it turned out, was again power, for power had to do with the control of both individuals and goods, voters and laborers (Adams 1970:4 and 5).

The present study intends to contribute to this line of research of anthropologists in industrial complex societies. It is a look into the organization of power growing out of the social networks of a group of units within the tobacco market. The marketing of this crop and the preliminary conditions for the economic transactions were originally studied with the intention of determining the interaction of a particular market system, its power organization, and the social networks of the units operating within a common system. The problem of the system's complexity was a prime target of the study as well as the organization of the different units within the system. From the exchange of the following strategic resources: tobacco, capital and liquid assets in the market place originates a distinctive segmentary technoeconomic organization which secures and protects a rational flow of these resources in society. This organization we will refer to as an eco-market system.

One of the more significant contributions of the present study is its

methodological approach in addition to its object of analysis. It does not deal with "the culture" of one group, of one community, of one city, or of one nation. Instead, it analyzes the social organization of power resulting from the production, purchase, processing, packing and exporting of tobacco until it reaches manufacturers in Europe or in the United States. This work then is the analysis of one product in order to understand the social consequences resulting from its structural flow. In this analytical perspective the operations of the peasants, the middlemen, the warehouses, the local packers, the exporters, and the international dealers, all come within the framework of one common system of adaptation. The various environments articulated through the flow of tobacco between these units overlap through a reciprocal feedback process consisting of social networks, liquid assets, tobacco and capital.

The value of this methodological approach is open to evaluation. Especially because of its technoeconomic exclusiveness and the apparent isolation with which the operating units within the tobacco eco-market system might seem to be operating. These "optical illusions", result from the methodological need to abstract and to delimit the cultural system under investigation. The insights provided by this approach into the nature of industrial complex societies outweigh the disadvantages. The advantages of this approach are as follows: First, it provides a framework for an examination of the activities and interactions of social units from different social classes, and national and international environments. Second, it tries to understand their operations in relation to the complex organizational structure they are a part of and to take into account the reciprocal processes resulting from the whole environmental system. Third, it provides an insight into the origin of the social stratification in the society and the resources of power within the system. Fourth, it acknowledges the structural complexity and the overlapping operating units in these societies while trying at the same time to build a model illustrating how the units come into contact

and articulate into the system. Fifth, it does not ignore the fact that economic or market transactions are supported by social networks.

The export tobacco production in the Dominican Republic has a number of relevant cultural aspects associated with it in the larger cultural frame of reference of the Caribbean. First, its production is not contingent upon a plantation organization nor is it a crop requiring large capital investments in the producing country. On the contrary, it is produced by minifundist peasants who traditionally have constituted a free peasantry and are market orientated.

Secondly, the crop is exported to European and North American manufacturers through the financial intervention of international dealers who subsidize the operations of a complex national organization to secure the crop and reduce their capital risks.

Third, the distributive system resulting from the operations of exporters and the local warehouses, plus the production activities of the peasants seem to be customarily free of governmental intervention.

Fourth, tobacco export is one of the three main sources of revenue in the Dominican Republic with sugar and coffee.

Finally, since it is an export commodity, its analysis will offer an insight not only into forms of dependence of some national groups from power elites, but also into the financial dependence of a whole nation upon foreign capital investors.

At this point it is necessary to recognize my personal indebtedness to Dr. Ken Sharpe for suggesting to me the present line of research; and to Mr. Antonio Lluberes and Mr. Frank Moya for helping in the historical research. Without the assistance of these scholars the present work would have been incomplete. Special gratitude is also due to my professors at Loyola University of Chicago who have introduced me into the field of Anthropology. Above all

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The cooperation of some official agencies has also to be mentioned. As institutional entities they in no way can be held responsible for the findings of the study, nor for the opinions expressed herein. They allowed free access to information and thereby facilitated research without trying to influence the findings. Among these organizations special recognition is due to the Tobacco Institute and its agronomists Genaro Garcia, Pedro Breton and Iturbide Zaldivar,

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Off all disinterested cooperation which I have received during the preparation of the present work, one requires special mention. It is that of Miss Rosemary Bearss who kindly and patiently proof read and typed these pages. This unnoticed job prevented these pages from being thrown into a waste basket and thus saved them in their last stage.

It is too difficult to do justice to each and every person who has cooperated in the present work. But above all, to those Dominican peasants and warehouse laborers who with their anonymous work and patient suffering represent the backbone of the country and the main reason of hope for freedom and justice in that Caribbean country in a prolonged state of mourning. Thus, to those mentioned and to those who have to remain anonymous, my personal gratitude.

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INTRODUCTION

The Traditional Anthropological Method

In the Social Sciences, Anthropology traditionally has been identified as the science concerned with the study of primitive and exotic cultures. This understanding of Anthropology might seem valid if we realize that: "From its conception, anthropology has --at least in principle-- considered all cultures at all times and in all places to be its legitimate province. In practice, however, anthropologists have generally concerned themselves with non-Western cultures, and especially with the small-scale and exotic among these" (Kaplan & Manners 1972:190).

Pre-literate and "primitive" societies have been studied by anthropologists as isolated, small, self-contained and culturally homogeneous. Corresponding to this formulation of the object of study, a characteristic method and technique became peculiar to anthropologists. The cultural or ethnographic method consisted in observing a sufficient number of individuals to ascertain the typical or expected behavior of the society's members which is then described as the culture. On the other hand, participant observation became both practicable and desirable for data-gathering as technique among small, homogeneous and isolated bands, tribes and villages.

Tribal culture is a construct based essentially on behavioral traits that characterize all members of the society. Although there are some differences associated with sex, age, role, and status, there are no major occupational, regional or social groups or segments that differ significantly from one another and can be said to have sub-cultures, and there are larger, supra-personal institutions that cannot be understood fairly well by studying the behavior of individuals. (Steward 1956:5).

But today this primitive and isolated world is disappearing. We are approaching --with certain reserve-- McLuhan's "global village" (1967:67). And as Weaver and White rightly point out, the time is overdue for a reassessment of anthropological methodology and techniques in order to study complex societies (1972:109). Whereas autonomy and intra-group functional independence may have been useful methodological assumptions when there existed a greater degree of cultural isolation, this is not the case any more. More complex sociocultural systems such as modern nations are not dealt with so easily. These assumptions of the traditional ethnographic method that culture consists of shared behavior will not serve to describe nor to explain the functioning of a government or a system of international commerce.

Industrial Complex Societies

Industrial complex societies not only seem to be the most recent level of social evolution, but also to have a relatively recent appearance in the stage of anthropological studies. Normally, a society seems to deserve the qualification of "industrial complexity" when it has, at least, the following characteristics: (1) a division of labor articulated through centers of role specialization; (2) levels of articulation; (3) wider environmental adaptation coordinated by centers of control; (4) a distributive system based upon industrial production and a cash economy of market systems.

(1) Its elaborate division of labor is organized by centers of role specialization. These centers consist of one or more social units. Both the integrating units and the center itself operate in order to fulfill certain social requirements by means of (i) a sophisticated technology and (ii) an interchange of information and other means within them.

The existence of a division of labor is not a sufficient reason for classifying a society as an industrial complex society. An intricate division

of labor was already present in archaic kingdoms and empires growing out from their mechanism of redistribution and in the guilds of pre-industrial cities. The social organization of the society through specialized centers is a further step toward complexity for at least two reasons. First, these centers of role specialization consist of various units, each one specialized in specific technical functions. Secondly, none of these centers appear to be self-sufficient while exercising their adaptational functions.

The appearance of the centers of role specialization probably is because of population and productive pressures. This will not only increase the dependence of the social units upon cooperation (see Durkheim's concept of organic solidarity 1933: ch.3), but contrary to Durkheim's predictions will also increase competition and conflict as result of self-motivation in an adaptational context (see Marx and Engel's concept of class struggle 1955). This situation is one of antagonistic cooperation.

(2) These centers of role specialization will be articulated among themselves in what Adams (1970:54) has methodologically referred to as levels of articulation which range from the local to the international sphere of social activity. The linkage between the groups will be both vertical (role centers at different levels) and horizontal (centers at the same levels) integrating operating networks and system of networks. The articulation of different specialized centers and of their specialized operating units, will constitute a complex adaptive system of the society both to its social and to its natural environment. The complexity residing in the supplementary operations of the centers of specialization and the structures resulting from their adaptational networks.

(3) Industrial complex societies have an adaptational capacity to a variety of strategic environmental resources and to various environments. In relation to each one of these resources and environments one or more centers of role specialization will be adapted; thereby, normally, the greater the number of these role

centers, the wider the range of operations of the society.

The wider range of environmental adaptation is facilitated through the operation of centers of control in the society. The most significant of these centers of control is the State itself. In addition, a group of centers of role specialization might also have specific centers of control inter-locking their operations. The social function of these centers of control is basically to regulate the operations of social units within their domain and to guarantee the flow of strategic resources within the different units. This articulation is achieved mainly by overlapping different environments and thereby the activities of the units within the environments.

(4) Finally, economically the distributive system of the society is usually based on industrial production and articulated through a cash economy of market systems in contrast to a subsistence economy. The sociocultural consequences of a 'market system' has been best explained by Polanyi:

The transformation (resulting from the Industrial Revolution) implies a change in the motive of action on the part of the members of the society: for the motive of subsistence that of gain may be substituted. All transactions are turned into money transactions; and these in turn require that a medium of exchange be introduced into every articulation of industrial life. All incomes must derive from the sale of something or other (such newly defined commodities as labor, land, money), and whatever the actual source of a person's income, it must be regarded as resulting from sale. No less is implied in the simple term 'market system' (1944:41; pp. 74-75, 68-76).

Obviously, there is interaction between division of labor and market exchange. As Belshaw noticed, the market does not come into existence to enable persons to dispose of surpluses. It comes into existence as a function of the division of labor, so that those who concentrate on production of one sort may obtain the produce of others (1965:78). But the complexity of the society's distributive system is not well characterized nor explained by calling upon the market exchange relations resulting from the society's division of labor. This market system is normally dependent upon the use of a specific technological

know-how and the recognized cultural value. The use of specialized machines in an agrarian and commercial society typically affected these societies.

The use of elaborate machinery and plant involved the development of the factory system and therewith a decisive shift in the relative importance of commerce and industry in favor of the latter. Industrial production ceased to be an accessory of commerce organized by the merchant as buying and selling proposition; it now involved long-term investment with corresponding risks. Unless the continuance of production was reasonably assured, such a risk was not bearable. But the more complicated industrial production became, the more numerous were the elements of industry the supply of which had to be safeguarded. Three of these, of course, were of outstanding importance: labor, land, and money. In a commercial society their supply could be organized in one way only: by being made available for purchase. Hence, they would have to be organized for sale on the market --in other words, as commodities. The extension of the market mechanism to the elements of industry --labor, land and money-- was the inevitable consequence of the introduction of the factory system in a commercial society (Polanyi 1944:75).

In summary, the development of the industrial market system was accompanied by a change in the organization of the society itself which now became almost dependent on the economic organization. The domestic units are no longer the units of production but the factories. In addition, new segmentary systems for the distribution of strategic resources have to be gradually elaborated and coordinated to replace former kin based distributive systems and secure the financial and capital investments in production. Thus, one of the main differences between so-called primitive societies and industrial complex societies' technoeconomic organization and economic activities is a legitimate field of social and economic achievement open to the operating units and their manifestation of satisfaction. In other words, the political economy becomes increasingly differentiated. It is a difference in the scale and complexity of the system resulting from industrial production and market systems, as well as from the emergence of elaborate networks interconnecting centers of role specialization.

Challenge to Anthropology

The traditional theories, methods and techniques of anthropology have

not prepared anthropologists to study the cultural system of these complex societies. The subcultural groups of the latter, such as communities, occupational classes, ethnic minorities, and the like, may not be exclusively studied by the traditional ethnographic method. Also, modern nations have certain nation-oriented institutions and features, such as governmental structures, legal systems, economic patterns, and religious organizations, which differ qualitatively from anything known in band and tribal cultures and which cannot possibly be grasped by ascertaining the behavior of the typical individual associated with them.

But it is not only a question of theories, methods and techniques. Referring to urban anthropology, Gulick denounced ten years ago both anthropologists unjustified statements when referring to urban situations, and their lack of urban field studies.

Because of their commitment to the all-inclusive idea of culture, anthropologists tend to claim the universal applicability of their principles of human behavior and accordingly have made sweeping pronouncements on the nature and problem of whole societies, many of which include urban environments (or cities). So indirectly and probably often unwittingly, anthropologists have encompassed cities. But only to a minor extent, in comparison to the research which non-anthropologists have done in cities, have they done research directly in and on cities (1962:445).

Even traditional studies of formerly remote and independent peasant societies have been affected by present day complexity of sociocultural systems. With the growth of cities and megalopolis, the country people are forced into establishing ties of dependence with them and to develop economic and political relationships, as well as relationships of status, with the city people, thus becoming what Redfield called "that special kind of rural folk we call peasantry" (1947:306). Even more today peasants are defined in reference to their subordinate relationships to a group of controlling outsiders (Wolf 1966:3-4; 13); and Adams argues that:

The 1954 revolution in Guatemala, supported directly by the United States and followed by the rejection of many of the advances made by the two

revolutionary governments, reinforced a fact that was already evident to some of my colleagues: it was impossible to understand the life trajectories of peasants and poor peoples in contemporary society without understanding the larger society within which they lived; and it was equally necessary to see how the larger society related to the world (1970:3).

At the present time the cultures of the world appear to be evolving and adapting to (or being incorporated within) one of a few cultural types, with a distributive system growing out from an industrial technology and an exclusively cash economy in a market system economy. Concomitantly, they manifest an increasing trend toward the interdependence of social, political and economic units. Thus, anthropology is confronted today with the study of complex sociocultural systems. This generates the following set of major problems:

(1) The modification and elaboration of a set of theoretical, methodological and descriptive concepts since much of the empirical data as the basic concepts and theories of anthropology have been derived from the study of primitive and relative autonomous social units.

(2) To develop new cultural theories, methodologies and research techniques that in face of present day large-scale and complex societies will maintain and reinforce one of anthropology's main contributions to social studies: its comparative method and holistic approach. In this perspective, it is vital to anthropology that an attempt be made to relate such apparently inscrutable phenomena as the social structure and the ideology of a complex social system to the basic technoeconomic arrangements by which the total sociocultural system interacts with its natural and cultural environment. This research should be conducted cross-culturally in order to determine functional interrelationships of cultural patterns which occur independently among societies in different parts of the world.

(3) In conjunction with the two preceding points, anthropology should probably understand and strive to overcome the "dilemma" in which urban sociology

in the United States finds itself according to White and Weaver:

Community studies with an increasing number of exceptions, are not related to the larger issues of structure; ...quantitative approaches tend to become overly narrow in terms of their theoretical import, to the degree that they are divorced from behavioral study in social contexts and rely upon survey data exclusively (1972:106).

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CHAPTER I

THEORETICAL CONSIDERATIONS

In this first chapter some theoretical and methodological considerations which guided the field work and helped to organize its findings are schematically presented. It has to be acknowledged that the present study operated within the frame of what Pelto (1972:7) has called a "general theoretical point of view". One which shapes various aspects of data collection and interpretation, without providing a set of axiomatic propositions from which research questions are derived. This type of research is mainly defensible "because no general theory exists at present which can effectively anticipate and prescribe all the relevant factors and variables affecting any given aspect of culture or social organization" in complex societies (Pelto 1972:7).

Culture as an Adaptive Mechanism

Culture

One of Anthropology's most cherished concepts is that of culture. In the process of adapting to the environment human societies develop and organize a set of adaptational features ranging from tools and customs to language and beliefs. These extrasomatic adaptational devices are referred to as culture. For matters of clarity, culture might be defined as the systemic organization of artifacts, institutions, ideologies, and the total range of customary behavior with which a society is equipped for the exploitation and transformation of the energy resources of its particular environment--or environments--and the subsequent distribution and use of them in time.

As such, culture is a diachronic process through which human societies are able to adapt to their environments. The main function of culture being the transformation of those strategic resources necessary for the maintenance and expansion of the society. In order to achieve this goal various groups within society have to organize their operations, select between different adaptational alternatives, and compete for control of their respective ecosystems. The cultural process of adaptation is historical by nature and has proven to be an endless task of deadlocks and innovations.

Between society and culture a very close interrelation is established. As a matter of fact, society and culture both represent facets of components in basic human situations.

If, for instance, society is taken to be an organized set of individuals with a given way of life, culture is that way of life. If society is taken to be an aggregate of social relations, then culture is the content of those relations. Society emphasizes the human component, the aggregate of people and the relations between them. Culture emphasizes the component of accumulated sources, immaterial as well as material, which the people inherit, employ, transmute, add to and transmit (Firth 1952:27).

Energy

Leslie White was the first anthropologist, to our knowledge, that systematically utilized the concept of energy. He explained the functioning of culture as resting upon and being determined by "the amount of energy harnessed and by the way in which it is put to work" (1949:367-368). Cultural systems operate only by harnessing energy in one form or another, and by transforming it in the production of human need-serving goods and services.

We may distinguish three factors in any cultural situation or system:
 (1) the amount of energy harnessed per capita per year; (2) the efficiency of the technological means with which energy is harnessed and put to work; (3) and the magnitude of human need-serving goods and services produced (1949:368).

The following pages include White's concept of energy but its usage departs from traditional understanding of it. Energy will not refer exclusively to the

physical or cultural ability to do work nor to a variable within a formula for cultural development (cf. White 1959:ch 2; specifically pp. 40-49). White's understanding of energy as the ability to do labor is too restricted for the purposes of this study; mainly because it unnecessarily remains an undefined potentiality amid an operating adaptational system. In addition, it seems to be reducible at times to society's technological output (White's product) and at others to the society's technological capacity ('energy and work are interchangeable terms'). If used in either sense, it is an over-emphasis on one variable of the cultural system.

Still in other instances, energy resources might be reduced to a physico-biological variable. Because the amount of work that the human organism is capable of producing will depend largely upon the food intake, energy is reduced to sheer diet calories. But an analysis of industrial complex societies through the theoretical perspective of food energy harnessing becomes cumbersome and methodologically inadvisable; (for a good analysis of the energetics of primitive cultural systems in terms of calorie consumption see Kemp 1972, and Rappaport 1972).

If it is granted that cultures might be viewed as mechanisms for ecological adaptation through the transformation, distribution and use of energy, then energy is the means, environmentally available, for subsistence, survival and expansion of the operating unit's existence. The subsistence, survival and expansion of the unit might be understood biologically and/or socially. Biological existence refers to the physical or organic sustenance and protection of life of the integrating members of the units. Social existence alludes to the expansion and maintenance of the unit's adaptational network; thereby it includes the web of social relations emanating from the unit's environmental activity.

In a sociocultural system energy resources range from mere raw products to manufactured goods, and will include all those resources necessary to permit the harnessing, transformation, distribution and consumption of the energy resources

within the system. The employment and value of these energy resources will be contingent upon a cultural perception of them. While energy resources have an objective element to them, they are also subject to a cultural perception both of their transformation and uses. Most important, energy resources themselves are culturally defined and as such their value and employment relies upon an evolutionary cultural process.

Because energy potentials are culturally perceived and defined, the discovery of new energy resources or uses of them, regardless of the means through which this is accomplished, should be expected to introduce a radical or partial readjustment of the cultural system. The effects of the cultural change being more or less radical in association with the strategic value of the energy resources involved in the process of change.

It remains for future empirical research to resolve the question of (a) which energy resources are more strategic (vital) in a sociocultural system; and (b) which ones are more commonly employed for their instrumental value to provide access or control over any other resources. In the meantime two considerations are relevant to non-instrumental energy resources in general. First, while the units in a complex society might adapt to different networks or sub-systems dependent on different energy resources, not all of them have the same determinant position for the socio-cultural organization. And secondly, the unit's existence, in terms of which energy resources have been defined, is a relative term for it can be distinguished, at least, a level of bare subsistence, moderate and affluent well being (cf. Samuelson 1967:17; Lenski 1966:36, 37-38).

Preliminarily, the energy resources upon which society's cultural system is contingent upon might be categorized into nuclear and peripheral energy resources. Nuclear energy resources are responsible for the subsistence and expansion of the social units regardless of its evolutionary cultural sophistication. Peripheral energy resources are associated with a secondary level of subsistence in which

accessory or supplementary sources as well as prestige and comfort factors determine the unit's form of existence once it has been secured by the nuclear resources. This classification tries to arrive at a distinction between indispensable and dispensable energy resources for the unit's existence while acknowledging that this distinction is being mediated by a historic-cultural perception.

Ecological Adaptation

One of the safest observations which can be made about culture is its adaptive nature. In fact, cultural ecology's main goal seems to be "the study of the process by which a society adapts to its environment" (Steward 1968:337). Evolutionary theory can be characterized as a succession of levels of adaptation, each level being distinct and providing human society with different capacities --both social and technological-- to sustain and propagate life.

By ecological adaptation is meant the process by means of which units obtain and maintain control over strategic energy resources of their environment for productive, distributive and consumptive ends. Operating units are any selected unit of analysis, be it a man, a human group, or a whole society, adapting and exploiting their environment. They are methodologically defined in relation to their output regardless of individual composition. This process of ecological adaptation can only be fully understood in a historical perspective because of the alternative strategies of adaptation it embraces and the options actually followed. In addition, the resources of the operating units are influenced by the historic experience of the operating units.

In any case operating units, as well as society itself, are unavoidably faced with the problem of optional strategic adaptation to the different energy resources of their environment. Man himself, as human groups in general, like all other living beings, is confronted with the problem of adjustment to his environment in terms of subsistence, protection from the elements, defense from

enemies, reproduction and organization of social life. Basically from these fundamental needs grow man's social action and thus the adaptive nature of the cultural system.

Broadly speaking, society's cultural mechanism of adaptation might be studied on two levels. First, with regard to the way cultural systems adapt to their total environment. For instance, we should consider such interrelationships between population, culturally styled necessities, the division of labor and centers of specialization, centers of control, social networks, technoeconomic organization, and the ways of dividing natural resources among those who need and use them. Secondly, we should consider this systemic adaptation with regard to the way operating units within a given culture adapt to one another.

Most recently, Bennet (1971:11) has suggested a third strategy closely linked to the former. Emphasizing adaptive behavior, he looks into "the coping mechanisms or ways of dealing with people and resources in order to attain goals and solve problems. Our emphasis here is not on relationships between institutions, groups, or aggregates of data, but on patterns of behavior: problem solving, decision making, consuming or not consuming, inventing, innovating, migrating, staying". Bennet's strategy, although recognized as significant, will not be followed systematically in this study.

Environment

It is impossible to think of adaptation without reference to some environment or to the energy resources in the environment for which operating units might or might not be competing. Explicitly, by the environment of a particular operating unit is meant any significant variable or set of variables beyond the unit itself whose relevancy relies upon its potential use as an energy resource, or its procurement value for energy resources. For analytic purposes of exposition, two main supracategories might embrace these variables: natural and societal

elements. Thus the adaptational process might not only be examined in relation to the natural environment, but also in relation to the social environment.

While on the one hand, the environment is composed of a set of objective strategic resources, on the other

the environment is not a natural thing; it is a set of interrelated parts, a product of culture... What this environmental is, is not discoverable objectively; it is a matter of perception (Leach 1965: 25 and 37).

Leach could have said that the environment, as the energy resources composing it, is a product of cultural perception. For any definition of what a strategic resource is or the possible procurement advantage provided by another operating unit will always be mediated by the cultural system within which the unit operates.

The term environment in actual field situations and for explanatory purposes might be too broad and vague, especially when studying a complex system. What is the adaptive environment of a specific unit in a total system? In order to answer the question Barth's exposition of the development and perpetuation of cultural differences by ethnic segmentation and economic interdependence in North Pakistan (1968) might become helpful. In this paper Barth significantly uses the biological concept of "niche" and speaks of an ecological niche as "the place of a group in the total environment, its relation to resources and competitors" (1968:387).

Accepting Barth's use of ecological niche, for the purposes of this study, the semantic connotations of the concept will be elaborated. First, the use of niches will not only refer to the place of a group in the total environment, but of any operating unit instead. Second, an ecological niche will delimit the concept of environment to a position within a complex of relationships within a geographic area or a social system or both. Third, emphasis is given to the fact that niches become adaptively relevant and advantageous because of their available energy resources, or because the adaptational advantages which might

be procured through the interrelation with other operating units. Fourthly, ecological niches are selectively and competitively occupied by the units and involve the cultural procurement systems of the society plus other relations between units and of units to natural resources. Finally, the basic adaptation of an operating unit within its ecological niche might be to the micro-environment of which it is a part, as well as to a single micro-environmental feature (such as a plant or a specific operating unit) which might even cross-cut several environments.

The adaptation of the operating units to their environments will be achieved through a complex of relationships organized in connection with energy resources and other operating units. If this adaptational activity is traced the resultant graph will represent the unit's "adaptational network". By the adaptational network of an operating unit is meant the web of relationships connecting the unit with either social or natural elements through which an environmental position is obtained, maintained and enlarged. The term network is not employed to refer exclusively to a structure in the tradition of Radcliffe-Brown with its formal and normative connotations. It is here employed as embracing principles of responsibility, election, accomodation and economy of effort.

For methodological purposes the adaptational network of any unit might be studied through a system approach (see Watson et al. 1971:ch3). Such processes as feedback, outputs, mapping of the environment by control centers and centers of role specialization and even homeostatic and morphogenic processes, employed in systems theory could be of methodological relevance for the description and understanding of the adaptational process of operating units.

Adaptational Gap

Up to this point ecological adaptation has been presented as if it were a mechanical or automatic process adjusting environment and operating units. Nothing is further from reality. If adaptation implies maximizing the biological and social

life chances of the operating units, maximization is almost always a compromise of the internal organization of culture and the external pressure of the environment. Every culture carries the penalty of a past within the frame of which, barring total disorganization, it must work out its future (see Sahlins 1968:369).

Adaptational systems might or might not be successful when evaluated in terms of either a cross-cultural (etic) criteria or a cultural criteria (emic). Thus the concept of "adaptational gap" is here introduced to refer to the second alternative which probably (this is still subject to empirical verification) results from two features of the system. First, the fact that the operating unit's adaptational systems are open ones competing for scarce energy resources with other social units in their environment. Second, because of the self-centered and non-altruistic nature of human action and of social life within the cultural system itself (cf. Lenski 1966:25-42; 441-442).

In any case then, to adapt is not to do perfectly well from some objective (etic approach) or cultural (emic approach) stand point, nor even necessarily to improve performance. It will be to do as well as possible under the circumstances, which might not turn well at all.

Culture as a System

Cultural Sub-systems

The concept of culture itself has been generally distinguished for explanatory and descriptive purposes in terms of subsystems. The major subsystems generally selected for study by anthropologists include: ideology, social structure, technoeconomics and personality. The latter, at the present time will not be included in the discussion.

Technoeconomic: Broadly speaking what Marx and other authors have conceptualized as economic infrastructure has been successively substituted first by the concept of technology and more recently by technoeconomics which seems

best suited to refer to the "modes" and "means" of production. The technoeconomic subsystem focuses not only on techniques and tools used by operating units in meeting their adaptational goals, but also on the social arrangements employed by the units in applying its technical equipment and knowledge for production, distribution and consumption of energy resources.

Every technoeconomic is a particular kind of social system. In addition to denoting specific sources of energy, artifacts, and customary ways of behaving towards the environment, a technoeconomic subsystem refers to the organization of labor, access to means of production, modes of distribution and allocating energy resources, and the definition of the socioeconomic status of the different operating units. These are some of the spheres in which the most fundamental cultural adaptations and adjustments have to be made after technological advances have become possible. In addition, it is in these spheres that people in most societies exhibit their fundamental conservatism because of the social consequences of these changes, and where power play becomes most determinant.

The importance of the technoeconomic organization to explain culture changes and even the organization of the cultural system itself has been clearly defended by White when speaking of the technological stratum:

We may view a cultural system as a series of three horizontal strata: the technological layer on the bottom, the philosophical on the top, the sociological stratum in between. These positions express their respective roles in the cultural process. The technological system is basic and primary. Social systems are functions of technologies; and philosophies express technological forces and reflect social systems. The technological factor is therefore the determinant of a cultural system as a whole... This is not to say, of course, that social and technological systems are not affected by philosophies. They do and are. But to condition is one thing, to determine quite another (1949:366; see part III).

Social structure: Structural studies in anthropology deal mainly with the way in which parts of a given system relate to each other. In the analysis of the relations between the parts and the whole, methodological precedence has been frequently given to "social" variables over "cultural" variables. The main reason

for this approach is that social relations, or human groups' interactions, "can be observed directly" in contrast to cultural patterns of behavior.

Social structure conceptualizations range from Evans-Pritchard's configuration of stable groups to Leach's set of ideal norms or rules, and Levi-Strauss' formal models of social relations. However, as a cultural subsystem, social structures have traditionally been conceived as the normative pattern of social behavior. The best example of this approach is the work of Radcliffe-Brown who defined social structures as "the continuing arrangement of persons in relationships or controlled by institutions, i.e., socially established norms or patterns of behavior" (1958:177); or in more sophisticated and abstract terms: "...human beings are connected by a complex network of social relations. I use the term social structure to denote this network of actually existing relations" (1952: 190; cf. Barnes 1954:43).

Insightfully, Levy Strauss noticed that Radcliffe-Brown identified and thus confused social structure with social relations because of his empiricemorphological approach. Social structures should not refer to social relations but to the models built upon the systemic understanding of the former. In this perspective, social relations are the empirical raw data from which the social structure transformational models are built (cf. Levy Strauss 1963:ch.15).

In addition to the understanding of social structures in the Radcliffe-Brown tradition, Raymond Firth (1951:39-40) observed that structural forms set a precedent and provide a limitation to the range of alternatives possible. Thus in order to acknowledge structural change a new concept was needed. While the continuity principle of society is found in the aspect of social structure, the change principle is found in the concept of organization "by allowing evaluation of situations and entry of individual choice". It should be noticed that although the undeniable value of the social organization concept, when it is understood as dependent upon "individual choice", will lead to the conclusion

that deviant personalities are the ultimate source of modification in the social structure. Especially since structural change is not permanent in space or in time, and Firth does not acknowledge the origin of this change from new cultural devices emerging within or encroaching into the systemic organization of society.

On the descriptive and functional level, the strategy of studying socio-cultural systems from the perspective of social relations and their networks is most profitable because it is the acting and interacting of individuals that will be observed in the field; (see more recent formulations of this approach in Bott 1957, Clyde Mitchell 1969). However, the explanatory value of the structural approach has long been put into question, especially when it comes to the question of origins and social change. The social structures are frequently formulated in normative and synchronic perspective. In addition, their value seems to be more than theoretical, methodological.

Ideology: The ideological subsystem of a cultural system covers the realm of values, norms, knowledge themes, philosophies, religious beliefs, ethical principles and the like. The term ideological is not here used as referring to a set of rationalizations being enforced by power upon a society; although this possibility is not excluded. Instead its meaning refers to the unquestionable observation that man is a symbolic organism. And furthermore, that he is dependent upon symboling to conduct his social life to such an extent that culture and ideology has even been identified. For instance, Goodenoug (1964:36) defines culture as an ideological system in itself. For him, culture "is not a material phenomenon; it does not consist of things, people, behavior or emotions. It is rather an organization of these things that people have in mind, their models for perceiving, relating and otherwise interpreting them." (See Tyler's definition of culture in terms of semantic domains in 1969:11).

The question of how much of a determinative role ideological factors play in cultural maintenance and change remains a highly controversial one;

(cf. Childe 1941; Redfield 1953; Levy Strauss 1962:117; Berger and Luckman 1966). Nevertheless, available studies seem to indicate that technological and social organizations in over all give rise to ideological transformations. The operating unit's conception of the relations between the cultural system, the process of ecological adaptation, and environment, is a function of modification of their own technoeconomic and social structure organizations.

The analytical consideration of culture in terms of subsystems grants the opportunity of employing different research and explanatory strategies by just emphasizing one or the other subsystem of culture. In addition, it provides the formulation of a functionalist model providing for interactive effects and accommodations between the parts of the system. Finally, it guarantees the provision for analysis of system-origin, system-maintaining and system-destroying variables.

Subsystems Interaction

The analysis of the cultural system in terms of subsystems is today best known in anthropology by such definitions as "a culture is an integrated organization of technology, social structure, and philosophy adjusted to the life problems posed by its natural habitat and by nearby and competing cultures" (Sahlins and Service 1960:53). These definitions are in line with previous definitions made by evolutionists (i.e., White 1949:366; 1959:6-8) and cultural ecologists (i.e., Steward 1955:40-41). But undoubtedly, Marx's strategy for the explanation of cultural evolution is behind contemporary formulation of cultural subsystems.

In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of their material forces of production. The totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions, the general process of social, political and intellectual life. It is not the consciousness of men that determines their existence, but their social existence that

determines their consciousness... The changes in the economic foundation lead sooner or later to the transformation of the whole immense superstructure (1970:20-21).

Recent field studies have contributed to condition the causal role which Marx assigned to the economic infrastructure in view of the interaction of the different subsystems; (see Cancian 1972:189-199; Bennet 1968:303; Polany 1968: 63-65; Nash 1967). Nevertheless, the most powerful generalization about cultural systems seems to be found by studying the relationship between the qualitative and quantitative aspects of the technoeconomic system for the harness and distribution of energy as the independent variables and the quantitative and qualitative aspects of the other cultural domains of sociocultural phenomena as the dependent ones. Because causal dependence upon the technoeconomic subsystem is not an absolute one to one effect, to explain particular socio-historical situations we have to consider the interaction between the different subsystems. But in any case, the cultural materialist research strategy requires that priority be given to studies concerned with the material conditions of the sociocultural system. Furthermore, cultural materialists' hypothesis should be abandoned for cultural idealists' hypothesis only after the material circumstances have been given careful consideration.

The understanding of the "relations of production" is complicated beyond Marx's definition in the preceding quotation by the presence of centers of control in complex societies, especially the state. In stateless societies technological change seems to be closely related to institutional change. But non-technological political institutions seem to be able to harness and employ sufficient power in state societies as to underlie and direct technological change itself. For instance, in stateless societies labor specializations are almost always tied to immediately available local resources and do not depend on transportation and importation of raw or finished materials. Items secured in trade are not essential

to survival even when they may be important in spheres of cultural adjustments. But trade that furnishes the raw materials for specialized production requires regulatory bureaucracies to negotiate treaties, assure safe passage and establish equivalencies in money, weights and measures, and to insure the dependability of supply. These activities can be carried only by state bureaucracies.

Thus the relations of production appear not as an autonomous and self-supporting range of the cultural system in complex societies, regardless of their decisive causal influence upon it. Centers of control have to be understood as connected and interacting in an infinite feedback process with the economic structure as defined by Marx. Furthermore, this interacting process takes place amid specific environmental parameters. The problem to solve in a research of industrial complex societies is then to discover the control exercised upon, and the circumstances determining the harness and distribution of energy resources within the cultural system. In other words, the power domains delimiting the modes and means of energy harness and distribution and the parameters of the resulting causal influence of the technoeconomic subsystem upon the cultural system at large. If this research strategy is not followed, the explanation of cultural change and of the social organization of the cultural process will tend to ignore the institutional complexity of the cultural system and its dynamics as well.

In general, it should be concluded that in industrial complex societies the cultural system should be analysed as the historical result of the subsystem's interaction. Theoretical formulations should acknowledge technoeconomic conditioning, especially to explain the sociocultural organization and its process of change, because of its causal effect upon the cultural system. The functional causality of the technoeconomic subsystem upon the cultural system relies in the control of the means of production plus the control exercised by the units upon the process of harness, elaboration, distribution and consumption of energy resources.

Subsystem Articulation

The recognition of cultural subsystems has undeniable theoretical as well as methodological advantages. This should not make us conclude that the subsystems are mutually exclusive or self-sustaining. On the contrary, they are analytical aspects of one complex reality, the cultural system. Thus, for instance, culture might be studied as social structure at the technoeconomic level just as ideologies are related to the other two subsystems. It is for this reason that when an anthropologist of any theoretical persuasion moves from an ethnographic description to an explanation, he is normally forced to employ theoretical orientations which have been developed from studies in all cultural subsystems.

If the aim of the anthropologist is explanation and the formulation of theories, he will discover that each of these orientations (theoretical orientations resulting from studies emphasizing one or the other of the subsystems) logically implies the other and that, therefore, all tend to converge when applied to a similar set of problems (Kaplan and Manners 1972:88).

The Analysis of Cultural Subsystems

Social Action and Social Organization

Social actions constitute the core of the subsystems of any culture. Without it the adaptational network of the operating units will be non-existent and ecological adaptation impossible. Operating units' adaptation is contingent upon environmental energy resources through their social actions. It is through these relations that the adaptation of the units is apparent and from them the cultural system develops.

One profitable method available to anthropology for the study of complex social systems is the analysis of social actions. Since the sociocultural system is to be understood as a working adaptational system, social actions should be understood as a social organization, and not as an erratic unarticulated behavioral output of the units within society. Thus a methodological approach for the study of adaptational processes may be developed by analyzing the social

organization of the cultural system. In this perspective social actions are not understood as isolated and random behavior but as a systemic set of relations for environmental adaptation by means of acts of choice and decision. Regardless of the degree of structural patterning and of complexity, the directional activity of the cultural system reveals itself as being contingent upon its internal organization.

As previously defined, culture is a "systemic organization" of various elements for the exploitation, transformation, distribution and use of energy resources. The systemic organization by which culture is defined has to be understood in association with the cultural system's social organization. It is directly upon society itself that culture is contingent. Through the organization of the adaptational activity of the operating units within society the cultural system is structured and understood.

The term "organization", however, requires some further specification. Most frequently social actions are identified with social structure while social organization is taken to be synonymous with social structure. But as Firth has argued, social structure stands for form while social organization stands for process in social life. While continuity is expressed in the social structure, variance in social life is embodied in social organization.

In studying a field of social relations, whether we are using the notions of society, of culture, or of community, we can distinguish their structure, their function, and their organization. These are separable but related aspects. All are necessary for the full consideration of social process. Briefly, by the structural aspect of social relations we mean the principles on which their form depends; by the functional aspect we mean the way in which they serve given ends; by the organizational aspect we mean the directional activity which maintains their form and serves their ends (Firth 1951:28; see 1964:35).

Thus by social organization is meant then, the systemic ordering of social actions by acts of choice and decision. Still in other words, it is the set of systemic strategies followed by the operating units in their process of ecological adaptation.

It is the organizational configuration of social actions that becomes relevant for the study of complex cultural systems. In contrast to structures, which in anthropological literature are associated with one cultural subsystem as well as with order, continuity and form, social organization pervades the cultural system and is to be regarded as a primary aspect of co-ordination and cooperation between the operating units for adaptational purposes.

As here employed, the term social organization has a number of methodological advantages over that of social structures as understood in the Radcliffe-Brown tradition. First, it refers to the working arrangements of social actions. Thus it is not limited to "structural" arrangements but includes a wider range of possibilities characterized in the process of ecological adaptation and in the process of cultural change itself. Second, organization does not refer to the total sum of social acts in the cultural system. It refers only to those that are significant to the directional flow of the cultural system. In this respect the social organization of societies have to be understood as heuristic models that, regardless of their scale, are constructed from the social acts. Third, social organization pervades the cultural system since it penetrates every single input and output of the system. Fourth, one of the principal characteristics of the social organization is its systemic nature; i.e., the directional activity of the operating units forming the system affects the ordered whole.

Accepting a broad classification, the operating unit's social organization will include social and economic relations. In the following section an analysis of these relations will be included in order to discover the nature of them.

Social Actions as Exchange Forms

Social organization, at least, can be subdivided for analytical purposes into social and economic organization. The core of the social organiza-

tion is its social relations while at the core of the economic organization, integration is obtained through economic relations.

Social relations are characteristic because of their systemic exchange nature. Some operating units communicate by means of a common set of symbols and objects in order to obtain an explicit or implicit goal. The goal achievement might be valuable to one or to all of the units involved in the interaction. In any case, social actions include a reciprocal give and take. For this reason, social relations have been interpreted as instances of exchange. For example, Blau defines social exchange as "voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others" (1964:91). Social exchange theory has been most influenced from Mauss' interpretation of gift-giving and gift-receiving. The French sociologist discovered a structure in most primitive institutions:

All these institutions reveal the same kind of social and psychological pattern. Food, women, children, possessions, charms, land, labour, services, religious offices, rank, --everything is stuff to be given away and repaid. In perpetual interchange of what we may call spiritual matter, comprising men and things, these elements pass and repass between clans and individuals, ranks and sexes and generations (1967:11-12).

This gift exchange taking place through social channels bases itself on three obligations: the obligation to give presents, the obligation to receive them, as well as to repay them (Mauss 1967:10; Sahlins 1965:162).

The need to reciprocate for benefits in order to continue receiving them serves as a starting mechanism of social interaction and group organization for the operating units. The adaptational advantages to be gained from entering into exchange relations furnish incentives for social interactions, and the exchange processes serve as a mechanism for regulating social interaction, development of a network of adaptation and a rudimentary social organization. The norm of reciprocity merely reinforces and stabilizes tendencies inherent in the character of social action itself.

Thus as Mauss himself recognized (1967:70) the nature of social exchange is a kind of hybrid. It results neither in purely free and gratuitous protestations, nor in purely interested and utilitarian production and exchange. Social exchange involves calculated risks and implicit agreements. In a recent study of agricultural operators in Canada, Bennet found that while

Jasper agriculturalists prefer to view cooperative economic exchange as a spontaneous expression of benevolence, good will, and neighborly assistance... The most important rule of exchange equivalence was: do not permit the exchange to get too far out of balance; although, it is good to let it be a little out of balance because this builds credit. There was a second rule which more directly governed the actual equivalence: try not to exchange things that are markedly different in value (or with people who have few resources for reciprocity), otherwise the balance becomes difficult to maintain (1968: 291 and 293; cf. Benedict 1968:2-3).

Exchange: Social and Economic

Some anthropologists and sociologists view social exchange as the basic principle upon which all of the actions of the operating unit are contingent. But contrary to this tradition some distinctions can be established at least between ritual, social and economic behavior.

First of all, much ritual and religious behavior is not necessarily governed by expectations of return, gain-loss considerations or manipulation of wants. Their expressive significance, lacking decision-making for specific advantages, may mean they are oriented to the pursuit of ultimate values rather than to the pursuit of immediate adaptational rewards in their adaptational networks. Thus they lack an exchange nature, at least in social terms. An analogical consideration applies to altruistic behavior in its pure form when existing.

In order to differentiate between ritual behavior and exchange relations Blau proposes the following criteria. First, the action must be led toward ends that can only be achieved through interaction with other operating units. Secondly, it must seek to adapt means to further the achievement of these ends (Blau 1964:5).

In this perspective social exchange might appear to be reducible to economic behavior because of their gain-loss considerations. Thus all social action will be equivalent to an economic relation. It has even been argued that because pre-money moral values were based in social exchange reciprocities with gain-loss considerations, they should be termed economic transactions (cf. Belshaw 1965:51; Bennet 1968:303; for a critical review of the problem see Dalton 1971).

One main characteristic differentiates social from economic exchanges:

(i) in contrast to economic relations, social exchange entails unspecified obligations (cf. Blau 1964:315; Sahlins 1965). Furthermore, it should be left open for empirical verification whether or not social exchange is characterized more frequently than economic exchange by (a) including a higher degree of personalism and directness in the network, and (b) consideration of a broader set of guidelines of the ideological and normative sphere at the operational level than does economic exchange.

Admitting a difference between economic and social exchange, it seems safer to maintain, that economic exchange is but one form of output of an important type from a wider set of adaptive responses available to the operating units for adaptational purposes. It is the attempted calculation of price and cost to the unit in its adaptational network. Both economic and social exchange then become a specialized field of the adaptive organization of the operating unit.

Exchange as an Adaptational Strategy

Be it social or economic, exchange in social life has a most important characteristic: it is a logistic and transactional output by means of which the operating units through a reciprocal exchange either implicitly or explicitly try to obtain or maintain certain strategic position in their environment. Its rational standing is one of means to ends.

Operating units do not enter into exchange relationships only because of a psychological process such as those underlying the feeling of attraction between individuals, but mainly to obtain various kinds of advantages in their environmental position. The economic and the social organization of the operating units are in line with the adaptational dimension of the cultural system of which they are the elements. Social and economic exchange have an adaptational dimension: they are a way of securing something in an environmental context. Exchange becomes a calculated risk within the cultural system in every single adaptational network.

It is this ever-present transactional nature of exchange in social and economic relations that is strategically most valuable for the study of cultural systems of complex societies. By understanding power in a broad frame of reference of control, power relations appear at the core of every exchange relation. Control is exercised for regulating and/or directing the operating unit's adaptational process by means of interchanges.

This is not an argument stating that all exchange relations have the same power dimension or the same adaptational strategic importance. It is only stating that there is a power dimension at every social and economic exchange linking operating units in their environment. It remains for empirical research to determine the significance of specific exchanges in cultural situations and the means through which they are controlled.

Power in Industrial Complex Societies: A Hypothetical Model

In general, power has been used to refer either to the tactical control that is exercised by an operating unit over the environment of another (cf. Weber 1947:152; Adams 1970:119), or to the unlegitimized use of control over another unit (cf. Buckley 1967:195). In a social relationship we will take power to mean the dialectical resultant of the effective control that one operating unit

holds over the environmental resources of adaptation of other units and the latter's ability to resist the former.

Power relations are a mechanism available to the operating units for adapting to their environment. It is not only a matter of units establishing a complex of relationships in their adaptational networks, but of exchanging through them adaptational advantages and obtaining control and access to energy resources at the base of their sociocultural organizations.

Power situations are features of every social action. They are the link uniting operating units and thus constituting the adaptational network. They spread their effect differentially through the entire environment but anything that threatens the ecological niche of another operating unit provides the basis for the exercise of power. Every operating unit will probably be related to others in some manner that can be initially estimated on the basis of a general understanding of the larger system of adaptation. In addition, by seeing power in social actions as a rational evaluation of a situation in which an operating unit decides to do what is best for it, a common or at least overlapping, cultural system is implied (cf. Adams 1970:117).

An important element in every power situation is the defensive feedback of the operating unit affected by the control being exerted upon its environment. Blau in a different theoretical setting proposes four situational alternatives for an operating unit to escape from the power domain of another:

Individuals who need a service another has to offer have the following alternatives: first, they can supply him with a service that he wants badly enough for him to offer his service in return... Second, they may obtain the needed service elsewhere, assuming that there are alternative suppliers... Third, they can coerce him to furnish the service... Fourth, they may learn to resign themselves to do without this service, possibly finding some substitute for it... Finally, if they are not able or willing to choose any of these alternatives, they have no other choice but to comply with his wishes (1964:118-119).

An essential quality of power lies in the fact that the various operating units command different resources of control. And, if nothing else, they can

obligitariness" (1954:4; cf. 1962:72). He classified types of legitimacy according to the means by which it was guaranteed. One of his most fundamental distinctions was between subjective guarantees involving "purely disinterested motives" and objective guarantees which depend on "entirely self-interest" (1947: 126-130). On the other hand:

legitimacy may be ascribed to an order by those acting subject to it in the following ways: (a) by tradition, a belief in the legitimacy of what has always existed; (b) by virtue of affectual attitudes, especially emotional, legitimizing the validity of what is newly revealed or a model to imitate; (c) by virtue of a rational belief in its absolute value, thus lending it the validity of an absolute and final commitment; (d) because it has been established in a manner which is recognized to be legal. This legality may be treated as legitimate in either of two ways: on the one hand, it may derive from a voluntary agreement of the interested parties on the relevant terms. On the other hand, it may be imposed on the basis of what is held to be a legitimate authority over the relevant persons and a corresponding claim to their obedience (1947:130).

At the core of the matter is the cultural perception which one operating unit has over the control other units are exerting over the environment and the latter's justification of this power exertion. Legitimacy then is the process by means of which ideological consent is blended with power exercise either in the exchange relations between operating units, or in the complex of relationships constituting an environment.

Normally an operating unit tries to justify its exercise of power by an appeal to legitimacy either in the form of custom, of law or belief. Custom refers to any habitual or usual course of action, or any established practice in the environment. An appeal to law implies a justification of power exercised through rules of conduct enforced by sanctions administered by a determinant locus of power. Finally by appealing to belief, a request is made to consensus in social actions by referring to non-ordinary and sacred causes, whether of a religious nature or of social dimensions, which are above and against established practices.

The process of legitimacy is closely related and dependent upon a

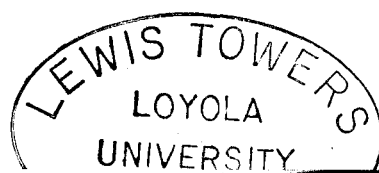
always command different amounts of physical force that they can bring into play. The indicators of power and the means of effective control of the interchange of energy resources will vary greatly even within operating units of different levels of articulation in the same environment. In any case, the adaptational threat of power will be effectively exercised when the units have some common value or need of energy resources and an understanding of the adaptational networks of the units in the environment.

Sources and Means of Power

One crucial question pertaining to data gathering and data analysis in the study of power relations as mechanisms of adaptation deals with the sources and the means of power available to the units. In other words, the "how" and "why" of power relations and their significance in the cultural system, especially within concrete ecosystems.

In power situations a distinction might be made between potential and effective power. The latter refers to the actual exercise of power while the former acknowledges the possibility of a future exercise of it. This distinction signals a deeper reality, i.e., the existence of sources of power upon which effective exercise of it is based. A difference is then apparent between sources of power and the means through which power is conveyed into the adaptational network. The former acknowledges the exchange nature of social action and the need of the operating units to possess or control certain adaptational features in order to bargain in their environments. Means of power acknowledges the fact that it is not sufficient to have command over certain resources of power unless it is exercised in actual social situations.

In industrial complex societies the main resources of power, especially at their technoeconomic subsystem, are: (1) control over energy resources; (2) control over the processes of energy transformation; (3) control over the



distributive system of transformed energy resources; (4) control over an operating unit's access to the exploitation of energy resources; (5) control over an operating unit's access to the process of energy transformation; and (6) control over an operating unit's access to the distribution and use of the energy surplus.

Congruent with traditional sociological interest it could be asserted that the process of decision-making and decision-implementing in light of the adaptational process characteristic of sociocultural systems becomes important when explained in relation to power decisions. However, in the perspective of the present considerations, emphasis should be given to the discovery and study of the means of power available and utilized by the operating units. It is one thing to have power (potential) and another to use it (effective). The means of power are embodied in the adaptational network of the operating units, especially in their social and economic actions, and include the channels and strategies through which power resources are conveyed into actual situations of control. The means of power might become associated with specific symbols of power.

Legitimacy

The exercise of power varies in its strategic manifestations. At the present time it suffices to distinguish three strategies: authority, influence and force. To clarify their difference some remarks are made in this sub-section in relation to legitimacy and the round of legitimate action in adaptational processes.

Operating units justify their possession and use of power by legitimizing it. Through this process of justification a shift occurs moving the basis of power from might to right (cf. Lenski 1966:55; Parson 1947:22). For Weber legitimacy was the endowment of a rule 'with the prestige of exemplariness or

codification of the technoeconomic and social structure of the cultural system to which certain or all of the operating units in the system contribute. Phrased in another way, to a valorative codification of the adaptational process of the society to its environment. The ideological subsystem then has a "practical", every day relapsing in social life through the framing and patterning not only of a model of social relations in general, but of legitimized action concretely. Within this context, the main goal of any research of complex societies should be to discover the process by means of which the units codify their environment and legitimize or not the exercise of power in their networks. Through this approach the establishment and maintenance of what Freire (1970) refers to as a "culture of silence" in developing societies will become explainable and most meaningful.

Power Strategies

Three main strategies of power relations were identified. They are: (1) authority which is the exercise of power by any one operating unit within the sanctioned range of legitimate action accepted in the adaptive network in which the unit is operating; (2) influence involves the exercise of power by one operating unit within the permitted but not sanctioned or prohibited range of legitimate action accepted in the adaptive network in which the unit is operating; (3) Force (distinguished from "physical force" meaning any kind of physical aggression) is the exercise of power by any one operating unit in opposition to the sanctioned and/or permitted range of legitimate action in the adaptive network in which the unit is operating.

The recognition of these three strategies of power evades in a certain way the Marx-Weber controversy on whether or not the essence of the state is "power" (here defined as "force") or "authority" (cf. Horowitz 1969). The core of the cultural system and of the state institution is power regardless of

whether it is exercised under one or another strategy. Nonetheless, the issue remains in deciding the process by means of which in some societies specific power relations have or have not become legitimized.

power and Reciprocity

The essence of power relations is the exchange nature manifested through actions of controls. In other words, it is the reciprocal constitution guided by the adaptational interests of the operating units. For this reason Sahlin's model of reciprocity (1965:145-149) can be translated in terms of power relations.

Power networks are not necessarily symmetrical. As a matter of fact, normally uneven control over environmental energy resources results in asymmetrical exercise of power. The exchange nature of power relations can be studied in the frame of adaptational strategies according to the directional flow of advantages. In this setting a model of power can be identified which includes three extreme poles in a triangular continuum (generalized, balanced, and negative reciprocity), and a resulting situation from the actual tension of power relations (unbalanced reciprocity).

(i) Generalized reciprocity: the modal exercise of power by means of which a unit, while benefiting the adaptational interests of another unit (or units), preserves or increases its sources of power while tactically endangering or not endangering it. While the manifest flow of advantages involved in the relation move in one direction, they preserve or even increase, the source of power of the donating unit.

(ii) Negative reciprocity: the modal exercise of power in which one unit preserves or increases its sources of power without conceding adaptational advantages to another unit (or units), proper exception of the maintenance of life. Thus the actual interchange of advantages approximates a one directional flow of exchange.

(iii) Balanced reciprocity: the modal exercise of power in which operating units either because competing on equal power resources for the control of the other's environment, or because mutually agreed so (alliance) for strategic reasons, are not able to or do not convert their relationship into one of the generalized or negative or unbalanced nature but instead maintain a proportionate or commensurate exchange. The flow of adaptational advantages is bi-directional without offering superiority to either one of them over the other's environment.

(iv) Unbalanced reciprocity: any modal exercise of power in which one unit preserves or increases its resources of power without establishing either a negative or a generalized or a balanced reciprocity.

The establishment of one or another of these reciprocities will depend upon considerations of the means and sources of power, on environmental energy resources arrived at by the operating units in their adaptational network. These types of reciprocities should be considered as representative of terminal situations in a continuum. Actual situations will approximate more or less the ultimate forms here signaled. The forms of reciprocity might be exercised both between operating units of the same power domains and/or the same level of articulation, as well as between operating units of different domains and/or levels of articulation. In any case the quantification of this model of power reciprocity should provide an insight into the assymetrical power networks within the sociocultural organization and its resulting effects of social tensions, conflict, submission and rebellion.

CHAPTER II

FOUNDATIONS OF THE TOBACCO INDUSTRY

The Dominican Republic and Its Agricultural Environment

Economic Environment

The Dominican Republic is an industrial complex society as defined in the introductory chapter. But contrary to the United States, Japan, and some European countries, its complexity derives not from a secondary or tertiary technoeconomic organization, but from its agricultural production in the midst of a world wide market system. Like any other Caribbean country, agricultural production constitutes the core energy resources of the Dominican Republic's international environment. The national economic has followed a dependency path in relation to industrial and capitalist countries: The Dominicans export agrarian products in exchange for manufactured goods and financial capital.

El modelo de desarrollo historico del pais ha seguido el marco de desarrollo clasico de los paises de America Latina, o sea, una economia volcada hacia fuera, exportadora de materias primas agricolas tradicionales e importadora de bienes de consumo y de capital. Asi, el pais ha crecido bajo la influencia y comando de los control lideres del desarrollo economico en el contexto mundial. Este desarrollo se ha basado, en la Republica Dominicana, en los cultivos de cana de azucar, cafe, cacao y tabaco, bajo una agricultura extensiva con la incorporacion de mano de obra y tierras que constituian los factores abundantes del pais. (Secretaria Tecnica de la Presidencia 1968:109)

The strategic importance of agricultural production in the import-export balance of the Republic becomes self-evident in the export revenues obtained through such products as sugar, coffee, tobacco, and cocoa. In the year 1970, for instance, these four leading export crops represented 84.2% of the total national export; in 1960 they represented 86.3% of the national

revenues, and in 1950, 89.7% (cf. Table 1)

TABLE 1

EXPORT VALUE OF THE LEADING DOMINICAN PRODUCTS

	1950	1960	1964	1966	1968	1969	1970	1971
Total exports:	86.9	157.4	179.4	138.0	163.5	184.1	213.2	--
Total imports:	43.0	90.3	202.4	166.9	196.8	210.4	266.8	--
PRODUCTS:								
sugar and its sub-products	40.7	92.3	96.0	79.8	91.8	98.9	115.9	145.6
coffee	12.3	22.6	30.5	20.9	17.9	21.2	28.9	23.9
cocoa	17.3	19.6	16.1	11.2	13.8	20.1	19.6	13.2
tobacco	4.7	6.7	14.7	6.6	11.3	12.7	14.3	20.8
bauxite	--	8.0	8.9	10.3	12.6	14.6	15.1	16.0
beef	1.9	2.5	--	.2	4.4	4.2	3.4	3.0
fruits and vegetables	2.2	.8	6.9	2.3	4.1	5.1	6.1	8.4
others	7.8	8.1	6.3	6.7	7.9	7.5	9.7	11.7

Values in millions of RD\$.

Source: Banco del Desarrollo 1972.

The position of the agricultural sector within the national economy can best be understood by sub-dividing the gross national product according to contributing economic sectors. The leading sub-sectors of the national economy, besides agriculture itself, include mining, industry, construction, government and commerce. In connection with each sector's output should also be considered their labor input. In this way, the output capacity of each sector--an economic variable--will best be understood in relation to the volume of labor consumption they generate--a socioeconomic variable. The strategic importance of the labor market relies upon its integrative force of different

operating units within the technoeconomic subsystem, and even the social structure of the Republic. In this perspective, unemployment constitutes a disorganization variable; above all, once isolated communities and subsistence economies disappear.

TABLE 2

GROSS NATIONAL PRODUCT BY ECONOMIC SECTORS

ECONOMIC SECTOR:	1950	1954	1958	1962	1966	1968
agriculture and livestock	29.6	28.5	26.1	25.8	24.9	23.3
mining, industry, and construction	18.4	20.7	22.0	21.6	22.0	23.1
commerce	18.3	19.0	18.6	18.0	16.4	17.5
government	8.8	7.9	10.2	12.4	12.7	11.5
transport, communications and electricity	4.5	5.0	5.8	6.0	7.6	8.6
dwelling ownership	7.6	7.1	6.6	6.3	6.8	7.0
other services	12.8	11.8	10.7	9.9	9.6	10.0

Prices according to 1962 values. Figures in percents.
Source: Aleman 1970:4.

TABLE 3

EMPLOYMENT VOLUME GENERATED BY EACH ECONOMIC SECTOR

ECONOMIC SECTOR:	1962 %	1964 %	1966 %	1968 %
manufacturing industry	62.1 (7)	71.9 (8)	71.3 (7)	74.6 (7)
sugar industry	32.6 (3)	40.3 (4)	40.8 (4)	42.0 (4)
construction	23.7 (3)	34.0 (4)	28.0 (3)	35.2 (3)
agriculture and livestock	440.2 (52)	464.0 (51)	474.4 (49)	484.0 (46)
mining	1.4 (-)	1.5 (-)	1.6 (-)	2.0 (-)
other services	216.1 (26)	249.5 (28)	260.0 (27)	279.5 (27)
unemployment	66.5 (8)	40.6 (6)	89.4 (9)	120.6 (12)

Figures in thousands of persons

Source: Aleman 1970:5; cf. Secretariado Técnico de la Presidencia 1970, Tables 28 and 30

Characteristically of underdeveloped societies, agricultural conditions in the Dominican Republic are poor. Productivity levels are low, for instance, in 1968, 46% of the national labor force in the agricultural sector accounted for 23.3% of the gross national product, meanwhile 14% of the labor force in industrial tasks--construction, sugar and manufacturing industries--was responsible for 23.1% of the GNP. Predictions for 1974 referring to these two sectors call for 53.8% of the national labor, accounting for 23% of the GNP while 16.6% of the industrial national labor produces 20.8% of the GNP. There will be a 7% increase in agricultural labor while a slight decrease in productivity is expected.

Still another characteristic element of the Dominican agricultural sector is its low annual average income. This situation is worsened by the decrease and in some areas virtual disappearance of a subsistence economy. In 1968, for instance, the national average income per laboring person was that of RD\$1,134.3 (one peso=one US dollar), but agricultural laborers only received \$497.5 (cf. Secretariado Tecnico de la Presidencia 1968: table 28).

This low income earning power decreases the peasant's saving abilities, puts him at the mercy of middlemen and money lenders, affects any technological improvement and investment in their plots, as well as personal and communal education and health facilities. But, above all, it contributes to the shrinking of the national industrial market because 60% of the national population is rural according to preliminary 1970 census data, and do not provide a market for domestic production.

This income inequality is not per se unjust or an impediment to socio-economic development. Differences in operating unit's abilities and responsibilities can explain and justify income differences in specific cases. But in the Dominican Republic, like in other Latin American countries, the income

distribution is a problem growing out of the unequal access of the rural population to sources of power, and their failure to understand the means of this power. The explanation of their income handicap, as well as their socioeconomic position in the national environment, lies mainly in their lack of control over land, technological know-how and financial resources amid a market system. Those who hold land, technology and financial capital, especially since few employment opportunities exist outside agriculture, control the keys to power and even to existence. In addition, they attempt to provide access to these for rural laborers.

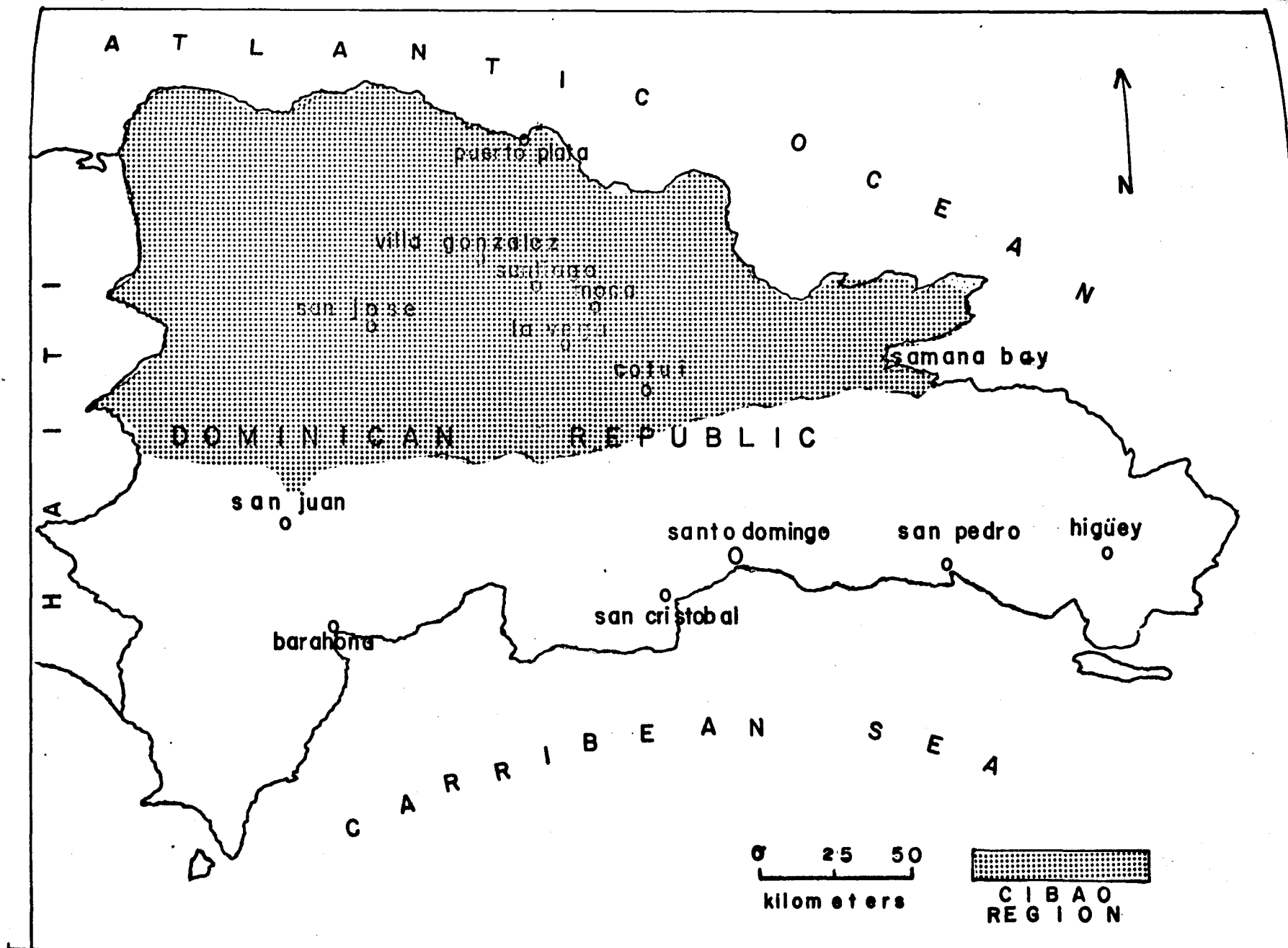
Geographical Areas

The national territory can be sub-divided into four major agricultural regions (see map). They are: (i) the Cibao, occupying the north and central portion of the Republic; (ii) the Southwest, embracing from Bani in the south to San Juan de la Maguana and west to the Haitian border; (iii) Santo Domingo region in the central south, including the National District, and from San Cristobal to the border of San Pedro de Macoris; (iv) the East, containing from San Pedro de Macoris and the eastern frontier of Samana to El Seibo and Higüey.

From the agricultural perspective, the Cibao is the most important region of minifundist production. This region has an approximate 70% of the tobacco production, and also other agricultural products such as cocoa, coffee, rice and bananas. The Cibao region includes 52% of the 4,011,589 total Dominican population, and 54% of the 2,407,652 national rural population, according to preliminary data from the 1970 census. 78% of the Cibao population is rural and only 22% urban, which differs significantly with the 40% national urban population. Its territory is 19,146 km², or 39.5% of the national territory.

Cibao's Landholding System

According to the ownership or to the use status of the peasant running the farm, it is possible for the Dominican landholding system to



Map. 1 The Dominican Republic.

be differentiated into: (i) private owned land; (ii) rented land, including the popular sharecropping system (aparceria or colonato) in which rent is paid by either half or one third of the crop's sale benefits; (iii) of the State (del Estado) any land which although belonging to the State is being used by a private party without adequate legal right for this; (iv) occupied land, farms which are being legally used by the occupants because of improvements (mejorias) made by them on the farms; (v) parcelerias, land obtained through the land reform program of the national government through the official Dominican Agrarian Institute; (vi) and any other landholding form not included in the preceding classification.

The Cibao landholding system is one of private ownership and sharecropping. The exact figures for sharecroppers are not available since they are grouped with the more formal procedure of renting. Nonetheless, especially, the figures for minifundists and even for middle farms of 80 to 160 tareas (63.9% of the rented farms in the 80 to 800 tareas category in Table 4) will probably refer almost exclusively to sharecropping. First, because peasants do not usually have enough cash to pay the annual rent at the beginning of the contract as legally required, nor do they have enough financial resources to guarantee a bank loan. Second, because they do not like getting involved with legal papers, signatures and lawyers; all these elements are required for the signing of rent contracts.

TABLE 4

LANDHOLDING SYSTEM IN THE CIBAO, 1971

FARM AREA: (tareas)	TOTAL	PRIVATE %	RENTED %	LAND % REFORM	STATE % OWNED	OCCU- PIED %	OTHERS
1-32	19,678	13,030(66.2)	4,816(24.4)	180(0.9)	344(0.7)	353(1.8)	955(5.2)
32-80	5,293	2,860(54.0)	1,679(31.7)	331(6.2)	108(1.0)	38(0.7)	277(6.4)
80-800	3,258	2,196(67.5)	813(25.9)	27(0.6)	70(2.2)	24(0.3)	128(3.5)
800 and more	258	206(79.8)	33(12.7)	2(0.8)	3(1.2)	3(1.2)	11(4.3)

Source: data elaborated from Secretariado Tecnico de la Presidencia 1972. Number of censused farms 28,487.

The subsistence and economic value of a farm depends on a number of interrelated variables. Among them are, the yielding capacity of the soil, the crop's productivity, the stability of crop prices in the market, the technological refinement of the peasant's labor, and the size of the plot. To these economic variables a sociological factor could be added, the standard of living of the community which will determine the "cultural necessities" to which the peasant is exposed. Thus a definition of what is a minifundio and what is a latifundio has to integrate these variables in it in order to evade arbitrariness. Nevertheless, and for preliminary purposes, a distinction between these two landholding systems, minifundios and latifundios, can be obtained by emphasizing the size variable.

In this case, a minifundio will refer to a farm extending from 1 to 80 tareas of land; on the other hand, a latifundio refers to any farm having more than 800 tareas. (One acre=0.4047 hectares=6.44 tareas. One hectare of land=15.901703 tareas. One tarea=628.8634 m².) Accepting these definitions, the Cibao region is predominantly divided into two structural organizations (see table 5): 84% of its farms are minifundist holdings occupying only 26.6% of its territory, while 1.5% of its farms are latifundios in control of over 34.6% of the region. Of the minifundios, 62.6% of them are conucos (from 1 to 32 tareas) in which a mere subsistence level is sustained through their agricultural operations.

TABLE 5

FARM EXTENSION IN THE CIBAO REGION, 1971

FARM AREA: (tareas)	%FARMS	%TAREAS
1-32	62.6	11.8
32-80	21.4	14.8
80-800	14.5	38.6
800 and more	1.5	34.6

Source: data elaborated from Secretariado Técnico de la Presidencia, 1972. The number of censused farms was 28,980 with a total area surface of 164, 0569 tareas.

Minifundist Plots

The landholding system of the Cibao region has traditionally been one of minifundios. These conucos and parcelas (32 to 80 tareas) were freely used according to the producer's needs during colonial times and the politically unstable years of the nineteenth century; when the plots were not privately divided, a shifting agriculture took place in the region amid little demographic pressure and available terrain. Even with present day latifundios there is not a region wide plantation system in the Cibao, and probably never was even during colonial times. Instead, minifundist households or family agricultural enterprises predominate in the area with their cash crop production. The decisions of the household have the main, although not exclusive, objective of satisfying consumption wants of the unit and not, as in a business enterprise, of capital investment and maximization of profits.

Minifundist peasants normally work their own conucos and parcelas with the assistance of non-remunerated family members and perhaps of some neighboring day laborers (echa dias or peones), (cf. Table 8). Household and market crops divide their plots; and according to table 8, 74.8% of them make their living out of their plots, and only 13% have to complement the revenues from their plots with wage labor in a nearby farm or as sharecroppers. Irrigation facilities are scarce and intensive technological agriculture is almost nonexistent among them (Table 6). Additional income is obtained in some cases working in neighboring farms as wage laborers at crop's time or by taking a conuco under an *aparceria* arrangement. Although middle and large landholding farms depend on wage labor--45.1% and 77.0% (cf. Table 7)--they accounted only for approximately 34% of the agrarian labor force in 1960.

There are not available statistics on the number of landless agricultural workers who have to earn their living day laboring. Nonetheless, their number is presumed to be high and their presence puts further strains in the overcrowded agrarian labor market (cf. Table 7), and upon family ties. In

terms of income, landless wage workers as a group tend to be worse off than producing peasants on minifundios, although there are different types of day laborers and different terms of employment; mainly because of greater insecurity of employment and lack of homegrown subsistence foods. Besides minifundist peasants can always complement their income by working as wage laborers.

TABLE 6

TECHNICAL FORCE USED IN THE CIBAO REGION, 1971

FARM AREA (tareas)	# FARMS	MECHANIC		ANIMAL		BOTH		NONE	
		# FARMS	%	# FARMS	%	# FARMS	%	# FARMS	%
1-32	18,481	961	(5.1)	7,812	(42.3)	529	(4.0)	9,179	(49.6)
32-80	4,705	524	(11.1)	2,447	(52.0)	336	(7.2)	1,398	(29.7)
80-800	2,816	372	(13.2)	1,344	(47.9)	382	(13.5)	718	(25.4)
800 and more	198	48	(24.3)	59	(29.8)	60	(30.3)	31	(15.6)

Source: data elaborated from Secretariado Tecnico de la Presidencia 1972. Number of censused farms 26,200.

TABLE 7

AGRARIAN LABOR FORCE ACCORDING TO PLACE OF WORK IN THE CIBAO, 1971

FARM AREA (tareas)	TOTAL	FAMILY MEMBERS ONLY		FAMILY MEMBERS ABOVE ALL		WAGE LABOR	
		# FARMS	%	# FARMS	%	# FARMS	%
1-32	18,481	13,217	71.5	3,754	20.3	1,510	8.2
32-80	5,290	2,654	50.1	1,081	20.4	1,555	29.5
80-800	2,916	939	32.2	663	22.7	1,314	45.1
800 and more	198	18	9.9	26	13.1	154	77.0

Source: data elaborated from Secretariado Tecnico de la Presidencia 1972. Information was available for 26,885 farms.

TABLE 8

MEANS OF ECONOMIC DEPENDENCE OF PEASANTS IN THE CIBAO, 1971

FARM AREA (tareas)	TOTAL	HIS OWN FARM %	NON-AGRICUL- TURAL ACTIVITY %	AGRARIAN WAGE LABOR %	NOT WORKING %
1-32	18,481	13,832 (74.8)	1,660 (8.9)	2,369 (13.0)	620 (3.3)
32-80	1,790	1,219 (68.1)	209 (11.1)	245 (13.6)	117 (7.2)
80-800	2,916	2,428 (83.3)	80 (3.0)	266 (8.9)	142 (4.8)
800 and more	198	129 (64.7)	6 (3.0)	44 (22.6)	19 (9.7)

Source: data elaborated from Secretariado Tecnico de la Presidencia 1972. Information available for 23,385 farms.

Latifundist and Agrarian Entrepreneurs

privately owned minifundios have to compete for land, crop's market prices, financial and technological assistance, with a traditional land elite and a newly arising agrarian entrepreneur. Structurally more significant, the latifundios are characteristically ill managed and their productivity levels are relatively lower than that of the minifundios (cf. Tables 17 and 19). The traditional landed elite is not able to improve their agricultural establishment not only because of cultural values and lack of technical abilities, but also because of their ill run operations which provide them with a respectable standard of living. Normally they command the political and economic power available in the peasant's environment; but, interestingly enough, they do not have liquid assets to invest.

Este relativo estancamiento de la produccion esta directamente ligado a la concentracion de la propiedad agricola. El grupo de grandes propietarios que tienen el control de una gran proporcion de la tierra, deja sin explotar una parte muy importante de sus propiedades. Las rentas de la tierra que este grupo obtiene son tan grandes, que la eficiencia en su uso es un factor mas que secundario, especialmente si se considera que no existe siquiera un impuesto proporcional al valor de la tierra. (Secretariado Tecnico de la Presidencia 1968:20; cf. Aleman 1970:15-16).

The only alternative to this large landholding social organization system comes from small but progressive and newly arising agricultural entrepreneurs producing for a market in order to maximize profits. They are still more the exception than the rule. Although statistical data on them is non-existent they seem to be operating efficient farms not for a household economy or the maintenance of a traditional way of life, but for economic motives of money profit.

Frequently entrepreneurs' farms range from 300 to 800 tareas; but this figure is a private field estimate. They provide labor opportunities to wage workers and run colonatos (sharecropping arrangements) within their farms without the characteristic patron-client relations observable between traditional peasants and landed elites and their respective sharecroppers.

By modern standards the Cibao producers on minifundist plots utilize their land at low levels of management and production. But they are forced to do so by circumstances. They do not have easy access to better irrigated fields and less eroded lands; nor to credit, machinery, improved seeds and fertilizers. Besides, they are excluded from the markets of these inputs through the lack of adequate sources and means of power which reside in the hands of the landed elite and other operating units. On the other hand, the big farm enterprises of the Cibao are generally poorly managed to such a degree that, within the limits of their labor and capital resources, smaller agricultural units are quite efficient in the exploitation of their land resources (cf. Aleman 1968: 211; 1970:15).

If this be the case, it can be concluded of the Cibao region, that production per tarea on large properties is generally inferior to that of smaller plots; whereas the value of production per worker is, on the average, less than on smaller farms. Higher average productivity of land on the smaller enterprises is the result of more intensive land use. This intensity of land exploitation outweighs all disadvantages in terms of poorer soils and lack of capital and technological resources by minifundist peasants; but nevertheless, it is not able to solve the crucial point: an agrarian population incapable of controlling its energy resources because of a "forceful" latifundist landholding system.

Historical Perspective

The early beginnings of tobacco culture by white settlers in colonial America took place in the following areas on the dates indicated: Santo Domingo 1531, Cuba 1580, Brazil 1600, Virginia, U.S.A. 1612, and Maryland, U.S.A. 1631. The tobacco grown soon furnished one of the chief products in demand in Europe as a commodity of exchange for the manufactured articles required by the colonists.

The Tobacco Boom: 1780-1880

The roots of the tobacco boom during the XIX century in the Dominican Republic are associated with an October 12, 1763 Ordenanza which created a tobacco factory in the colony. This factory should "promover y acaparar la cuota de tabaco que se asigno a Santo Domingo, tabaco del Cibao, y sobre todo en la jurisdiccion de Santiago y en todas las demas que puedan producir abundantes cosechas de buenos tabacos para el mayor adelantamiento de la construccion de cigarros que se deben labrar en las Reales Fabricas de Sevilla" (cited in Sanchez Valverde 1971:66).

Coming out from the shadow of the tobacco from Cuba, Dominican tobacco started successfully to compete with the former in Spain because of its quality. Yield figures from those years indicate an increasing trend in production which did not recede until the ending of the next century. For instance, in 1773 the production was of 3,131 qq. (quintals of 50 kilos) and the next year it increased to 6000 qq. Immediately agricultural activity augmented by the construction of roads to markets and ports; the best known construction of the time was the preparation of the Camu and Yuna rivers for tobacco transportation from the Cibao region to the Santo Domingo port in the south. Economic activity increased, above all, in the city of Santiago and its rural communities (parajes) of Gurabo, Egido, Buenavista, Licey, Moca, Limonal, Jacagua, Guazumail, Quinigua, and others (cf. Sanchez Valverde 1971:48 and 67). Before the end of the century tobacco production had spread from Santiago to La Vega and Cotui.

If production figures can be used to indicate a social organization and the structural arrangements of a population, then a tobacco sub-culture can be inferred from the following. In 1800, Pedron reported that in Santiago and La Vega there were not great tobacco plantations accounting for the high output of his commodity; nevertheless, the production increased and ranged from 12,000 to 14,000 pesos because of the high number of small producers (1955:171). During the years of 1800 to 1845, the colony experienced some of its most turbulent

political, economic, social and ideological years. Two Haitian invasions and twenty two years of Boyer's occupation, one French government, the period of Espana la Boba, and the wars of independence against Haitian occupation. However, in 1821 Morillos wrote that although

la agricultura habia decaido por las guerras y la emigracion. El escaso comercio se reducía al tabaco que se exportaba a traves de Puerto Plata; unos pocos cueros, caobas, mieles y aguardientes. No habia nada de cafe, cacao, ni de algodon, ni del anil que se cultivaba en las pasadas estancias. La industria en esa epoca era nula (cited in del Monte y Tejada 1890:275).

And, furthermore, by 1845 the tobacco harvest increased to 30,000 qq. with a corresponding revenue of 46,000 pesos fuertes (foreign exchange currency) (cf. El Dominicano newspaper, March 28, 1846; #14, p.54).

This increase in production for which a large number of small producers was responsible occurred at a time in which agricultural production of the colony was near a stand still. Only the tobacco export, the cutting of mahogany, and some selling of livestock to Haiti provided some revenue to Santo Domingo (cf. Pedron 1955:172; Lyonnet 1955:127 and 136). Furthermore, as Morillos indicated in his preceding cite, the tobacco production increased amid those same conditions which had eliminated production of other crops like coffee, cotton and cocoa in traditional Dominican agricultural estates (estancias). As a matter of fact, analogous although more radical political and social conditions-- independence from France, and freedom of the slaves--in Haiti destroyed in those same years its colonial agricultural organization and the output of the former colony.

The tobacco production boom did not only survive the unstable first half of the XIX century but it continued its expansion after a relative decrease in output in 1844, through the tumultuous years of the First Republic, the succession of the nation to Spain, the War of Restoration in 1864, and the struggle for power between Santana and Baez and their followers up to the time of Luperon and

Heureaux. Antonio Lluberes (personal communication) estimated the tobacco exported from the Dominican Republic in 1856 by the ports of Santo Domingo and Puerto Plata to be 2,034,118 pounds. Meanwhile, in 1860 the export production ranged from 60,000 to 80,000 qq. with an approximate value of 650,000 to 700,000 pesos fuertes (cf. Alvarez 1955:97). And for 1888, Hoetnik cited the tobacco harvest in 175,636 qq. (cf. 1971:117).

Thereby, the commerce resulting from the tobacco export plus the selling of mahogany and some livestock still constituted the main source of revenue of the newly born Republic after 1854. As stated by a newspaper of the Republican period:

Todo el que esta al corriente de la historia patria, no pondra en duda esta verdad; la Republica ha visto siempre satisfechas sus mas urgentes necesidades con los rendimientos de los derechos aduaneros, y estos han sido producidos en mayor cantidad con la exportacion del tabaco, y esa industria ha permitido que se han hecho para cubrir las cosechas enormes importaciones, ya de mercancias, a todas las demas industrias que en pequena escala se han mantenido en el pais (cited in Bono--1881--1964: 195; cf. Bono 1964:199; Pedron--1800--1955:172-173).

The expansion of the tobacco industry was associated and dependent upon international demand of the Cibao leaves since production was neither consumed nor processed in the colony. During the eighteenth century, the Dominican tobacco was mainly exported to Seville, Spain. Regardless of colonial export controls, producers from the vicinity of Santiago did customarily sell clandestinely their crop in the form of andullos to the French in Haiti to be processed as rape in their factories (cf. Sanchez Valverde 1971:63-68, 185-186). The historical record is not clear on when this Spaniard colonial monopoly was liberalized; some signs in this direction appear in a 1778 Ordenanza by which "se permitio que, cumplidas las cargas de surtir las reales fabricas, pudiesen vender los cosecheros los tabacos sobrantes en la colonia francesa (Haiti), pero aquellos 'que por su baja calidad no son de recibo en las reales fabricas', tomando por pago solamente dinero o negros" (Rodriguez Demorizi in Sanchez Valverde 1971:66).

It seems safe to maintain, however, that with the Haitian invasions of 1801 and 1805, plus the French government of General Ferrand in Santo Domingo, export restrictions of the Spanish government were lifted up and hardly re-established under the decadent period of *Espana la Boba*. In any case, when Boyer invaded Santo Domingo in 1822, tobacco was already exported to Martinica, Ave de Gracia, Saint Thomas and Curazao; all French, Dutch and Danish Caribbean colonies (cf. Moya 1972:52). Later on in 1860, Alvarez noted that Dominican tobacco was exported to Puerto Rico, Saint Thomas and Curazao; in addition to these Caribbean customers, merchants from Hamburg and Bremen in Germany bought the Dominican leaf to manufacture cigars which they then sold as habanos (Cuban cigars of high quality) but with lower prices (--1860-- 1955:97).

The preceding export figures and commercial transactions are meaningless unless we realize that the tobacco boom was taking place in the midst of an economic vacuum, and most probably with little official guidance. Emigration, colonial political instability, and Boyer's occupation of the former Spanish colony and his abolition of slavery--all these circumstances reinforced an almost implicit ideal in the colony: a sedentary life characterized by the absence of any strenuous labor or socio-economic enterprise and based on a subsistence economy plus a cultural valorization of social autonomy.

...y en una palabra, infinidad de menudencias que, aunque parezcan despreciables, forman el fundamento de la verdadera felicidad y prosperidad de los pueblos, la cual no consiste en producir mucho azucar y cafe a fuerza del sudor de millones de esclavos, sino en tener asegurada la subsistencia con su propio trabajo y vivir y buena policia civil y religiosa (Heredia y Mises --1812-- 1955: 168; cf. Moya 1972:62, 88-89; Bonnet 1955: 276-277).

Whether or not this idyllic and non-industrious idealization of life became a social reality, cannot be proven from the historical record. Nevertheless, it seems that the striking experience of the Haitian domination (1822-1844), following a colonial period characterized by apathy and lack of concern towards the cultural organization of Santo Domingo from the part of its Spanish

metropolis, disarticulated the incipient Dominican technoeconomic organization, harming its socio-economic initiative, and the Dominican self-confidence to project and develop an independent society. Within this political, economic and social environment the Republican projects of some elite trinitarios could not and did not find an echo in calm Republican periods among the rural and urban sectors of the nation.

Describing the rural and urban dwellers in the Dominican Republic after the Haitian occupation of Boyer which ended in 1844, Guridi characterizes them as lacking any interest and hope for the future; they seemed to be possessed of a deterministic approach to cultural life. "En una cosa es muy poco alterada la mancomunidad que existe entre unos y otros campesinos y gentes de los pueblos, asi como entre la mayoria de los que habitan en las ciudades: a saber, en que carecen de toda clase de aspiraciones; no se apuran por el manana" (--1864: 1955:411; cf. Soulastre --1809-- 1955:61).

According to reports from the period on the nature of the Republic's social organization it should be concluded that there was not an agricultural technoeconomy functioning in the nation. Only the tobacco harvest had structural significance in the eastern side of the Island. Most probably, the informal social arrangements at the tobacco plots in respect to labor, which was family obtained and free, and in relation to commercial transactions, fundamentally organized outside of the political structure, permitted the functioning and expansion of the tobacco industry. For instance, in 1860 Campomanes reported to the Spanish government in Cuba:

La agricultura puede decirse que no existe, pues a excepcion de unos sesenta mil quintales de tabaco que se recolecta en las provincias de Santiago y Concepcion y una corta cantidad de cafe de superior calidad en las del sur, que se exporta para el extranjero, no se cultiva ningun otro producto a pesar de la facilidad que se obtendrian todos con la mayor abundancia: no hago mencion del azucar porque escasamente se fabrica el necesario para el consumo de la Isla pero si la merecen los cueros al pelo y una cantidad considerable de cera que se exporta para Europa (--1860-- 1955:106-107).

Amid this cultural environment it should not be of surprise that the center of power in the newly born Republic was transferred from the eastern cattle ranches and the political centers of the capital in the southern city of Santo Domingo, to the tobacco Cibao region. There, local merchants and exporters of tobacco not only integrated a new oligarchic center, but also were able to heavily finance the War of Restoration against Spain from 1863-1865. At the same time, and most important, a popular movement articulated by small independent Cibao peasants took arms against Spain in the name of the nation; the cultural identity of an independent country previously expressed by the Trinitarios was now materialized and fought for by countryside peasants and urban dwellers of no special intellectual preparation or in control of huge economic interests.

As ex-president Bosch has well understood:

Esa sociedad (integrated by tobacco producers, merchants and exporters) iba a impulsar el desarrollo de la riqueza cibaena y la formacion de una pequena burguesia comercial que llegaria rapidamente al nivel alto de la pequena burguesia e iba a convertir al Cibao, por mucho tiempo, en la region dominante del pais en el campo economico, en el social y en el politico. Santiago fue la cabeza y el alma de la guerra Restauracion porque casi un siglo antes habia comenzado a organizarse en sus campos la sociedad de los cosecheros de tabaco, y Puerto Plata se fortalecio de tal manera con la exportacion del tabaco que el centro de su aduana era de importancia vital para sostener un gobierno en el poder (1970:168; cf. Garcia 1969, vol.III:395-500).

Social and Structural Environment

The tobacco industry in the nineteenth century became identified with the Cibao region, just as the latifundist's cattle ranches (hatos) to the East. Its political, economical and social importance was widely recognized. Contemporary political writers speak of the Cibao's "society of tobacco growers" (Bosch 1970: 159-171), and of its affluent middle class in opposition to other region's rural proletariats (Jimenez Grullon 1965:146-147).

How was it possible that amid political and economic turmoil in the nineteenth century, the tobacco industry developed to such magnitudes as to

constitute a sub-culture in itself in the Cibao? No simple answer exists. But probably some of the industry's adaptive features contributed to this development. Some of these features are: the informal family labor organization sustaining the tobacco harvest in contrast to complex plantation organizations; the favorable profits obtained without great extensions of land by the growers; the private non-governmental initiative it originated; furthermore, the structure it developed to permit the flow of capital and tobacco from growers to international purchasing merchants, and viceversa.

The tobacco harvest in the Cibao gave rise to a special type of agricultural life and to a special kind of national peasantry. The tobacco society, in sharp contrast to the prevalent social organization of the hatos (cattle ranches) in the East, did not employ great extension of land. In addition, the tobacco harvest is labor demanding and time consuming, and augmented the personal relations of the grower and his economic networks while suppressing the idle life of the hatos with social and economic initiative and risk taking. On the other hand, in the tobacco's regions there is no great human agglomeration like in the sugar plantations. Besides, tobacco harvest does not require machinery, mills nor elaborate physical and chemical equipment; not even railway transport systems. In other words, at least in comparison with other cash-crops like sugar, tobacco was not a capitalistic venture dependent on great territorial and industrial scope and the size of its long term investments.

On the contrary, the cultivation of tobacco demands a yearly cycle of steady work by persons who are skilled and specialized in this activity. Tobacco plots being small and family labored, time consuming, and able to guarantee the economic needs of the family, probably developed a strong eco-system integrating land-family labor-cash crop. Only in this way the devotion and initiative of the tobacco grower to his field and his crop, his constant concern with weather and climatic conditions, the acceptance of the painstaking manual care the plant

requires, and the legendary responsibility and initiative of the Cibao peasant, can be explained. As Ortiz writes referring to the Cuban tobacco growers (1947:65), the personal element always predominated in tobacco growing; there is a patriarchal, intimate quality about its free work.

This seems to have been possible because the tobacco harvest in the Cibao region developed two important characteristics. First an early appearance of small but privately owned plots of land to harvest; the only exception to these conucos was the presence of sharecropping land which can be traced back to the end of the XVIII century (cf. Lyonnet --1800-- 1955:131), and signals the existence of big landholders also in this region of the colony. Bono points out that, in sharp contrast to the rest of the Republic where common lands (terrenos comuneros and ejidos) and great private estates prevailed, and where shifting agriculture was practiced from one plot to the other season after season, in the Cibao the landholdings are divided (deslindados) and privately exploited thereby promoting private ownership and agricultural activity:

Podemos muy bien decir que la propiedad, salvo la deslindada del Cibao, no tiene leyes en la Republica, porque casi todos los terrenos son comuneros, y esta es una de las faltas mas trascendentales en legislacion. Mientras el propietario este convencido de que su propiedad no es sagrada, en tanto que no se le garantice lo suyo contra usurpaciones, no habra agricultura, no puede contar ni aun con lo suyo y por consiguiente no cobra amor al trabajo (Bono --1857-- 1964: 82; see Hoetnik 1971:13-14, 17, 40).

Furthermore, Alcibiades Alburquerque emphasizes the process by which the Cibao lands became divided among small producers:

El relativo incremento agricola en algunas regiones del Cibao durante los pasados anos (after the XVIII century) y la densidad de su poblacion crearon la necesidad de que cada familia campesina buscase espacio vital para cubrir sus propias necesidades. De esta manera se realizo una natural y espontanea reparticion de las tierras, y se fundaron las pequenas heredades y afincaron en ellas su bienestar. Esa adquisicion de los derechos sobre la tierra, como resultado de ese desarrollo agricola, se efectuo sin graves interferencias, ni violentos desalojos. Centenares de familias pobladores de esas regiones, limitadas en su pequena heredad siguen viviendo de generacion en generacion del cultivo en sus limitadas areas de terrenos asi adquiridas... (1961:30; see pp. 12-32, and especially p. 31).

Thus, the landholding system in the Cibao contrasted to that of the rest of the Republic. In the latter, even with the low price of land (six francos per fanega--one fanega corresponds to 1293.84 square meters) at the beginning of the XIX century, because of rural poverty, great extensions of land were in the hands of a few landowners forcing the rest of the agricultural population to either sharecrop or work for an agricultural wage (peones); in either case, rural dwellers went without a private plot of land (cf. Pedron 1955:171; Lyonnet 1955:131, 135, 194-195). According to the Dominican historian Moya in his recent book (1972:111-115, 163) not even Boyer's agrarian reform in the occupied Santo Domingo was able to break down the traditional control of big landowners over the land in the eastern and southern provinces. As a matter of fact, the Haitian occupation was not even able to instaurate a landholding system of private lands in the former Spanish colony where tierras comuneras and ejido lands had been the customary practice; proper exception of the Cibao region where small tobacco producers operated (cf. Moya 1972: 46, 57-58, 87-89). Not until the introduction of the sugar industry with its capitalist investments did the land acquire such high prices as to transform the traditional use of the tierras comuneras and cattle ranch land into a system of private landholdings in the eastern and southern provinces of the Republic (cf. Hoetnik 1971: 29-30, 40).

The tobacco plots under harvest had little labor land resources; nevertheless, the tobacco profits of these small family plots were able to provide for the economic needs of minifundist producers. In fact, the mere presence of tobacco in the plots was sufficient guarantee for financial assistance by local merchants and a secure source of economic improvement in the agrarian environment (cf. Bono 1963:193-194, 363). Randolph Kein (--1868-- 1968:29) estimated an average plot of tobacco in the Cibao around six acres of land (38.64 tareas). And back in 1800, Pedron reported that the high production of tobacco grew out of a high number of small producers in contrast to coffee plantations in Haiti.

These self-sufficient and resourceful growers, working amid a mixed market and subsistence economy, were most probably the first representatives of a national peasantry: they had their own plots, worked for a market, and their purposes were not profit maximization but the sustenance of a household organization. In other words, the tobacco peasants did not view their position merely from an economic point of view, as if they were running a business enterprise for maximum profit with all inputs and outputs valued at market prices. Rather, the tobacco peasant saw himself as, and in fact was and still is, part of a familial household. This household affords him additional labor services which have no real market price. On the other hand, he must try to provide a subsistence from his plot for his household at all costs; he could not discharge its labor even if its retention might become noneconomic.

The second characteristic of the tobacco region was its free labor. Although there were African slaves in the zone (cf. note #247, in Sanchez Valverde 1971:186), nonetheless tobacco harvest did not require slave labor like the sugar industry did or even Haitian coffee plantations.

Sin embargo, en las dos provincias de La Vega y Santiago, o sea en el Cibao, siempre se continuo cultivando el tabaco en tales terminos que nunca bajo de cien cuenta mil quintales la exportacion de este articulo, el cual constituye el primer ramo de su movimiento comercial, y es causa de la riqueza comparativa de aquel hermoso departamento. Pero eso se debe a que alli nunca hubo tantos esclavos como en el sur de la antigua colonia: el trabajo libre producía las ventajas que le son inherentes; y, por lo tanto, cuando Boyer abolio la esclavitud, ya los hombres de la raza africana, los cuales no eran muchos, habian adquirido los habitos y el estimulo de quienes saben que trabajan para su provecho (Guridi --1864-- 1955:410).

Furthermore, even the socio-economic dependence of sharecroppers from big landholders was not comparable to that of slaves and wage laborers in cattle ranches and sugar estates. Their semi-independent status granted them more freedom of operation than to the latter. Tobacco sharecroppers had the opportunity to discuss the price of their tobacco and their rents, to intervene in tobacco transactions. Besides they were in full charge of production activities and

administered their own households independently from their landlords. As a matter of fact, they seem to have even been able to save from their reduced profits, and could obtain production credits from their landlords. In overall their status approximated that of small independent tobacco producers more than the one of slaves and peones in other estates.

Most interesting in the cultural perspective, the tobacco production boom probably took place beyond official guidelines and advancement. True that the tobacco industry was regulated and at certain moments even controlled by colonial and national governments; confer, Actas de Sesiones General del Gobierno Restaurador: March 30, 1844, and July 7, 1857; Boletín Archivo General de la Nación #8, p. 420 and #9, p. 76; Aristy 1957 vol.1:410; Bosch 1970: 205; Colección de Leyes 1864:290 and 338; 1890:448. Nonetheless, the frequent reproaches of official inefficiency seem to indicate that the unstable governments of those years probably took advantage of the revenues of an industry which they had not promoted, but because of the socio-cultural variables previously alluded to, flourished; cf. Lyonnet 1955:126; Bono 1964:195-196, 198, 268-269.

One of the most significant, and at the same time revealing, interventions of the national government with the operations of tobacco merchants, exporters, and producers, took place in the 1856-1857 tobacco season. When Baez took over the government in 1856 the national currency in the form of paper money was almost non-existent. Under these circumstances the value of the peso fuerte (the international exchange currency) decreased considerably forcing exporters to introduce great amounts of gold and silver currency in the country on account of the coming tobacco harvest. As a consequence, the national currency--the Dominican peso--became almost in disuse, especially in the Cibao.

Cuando el presidente Baez ingreso al poder en 1856 circulaba el peso fuerte en la Republica a razon de 68 3/4 unidades, o lo que es lo mismo, valia la onza de oro \$1.100 nacionales; pero como no habia mucha abundancia de papel monenda, el oro acunado bajo de tal manera

en visperas de la cosecha de tabaco, que las transacciones llegaron a celebrarse a cincuenta por uno. Como era consiguiente, los exportadores del Cibao comenzaron a introducir plata y oro en tan grandes cantidades, que el comercio en general optaba por el pago de sus derechos en esas especies de preferencia a la moneda nacional (Garcia 1968, vol. III:226).

At this time the Baez government supposedly in order to protect the national currency and the transactions of the peasants, ordered a monopoly of the tobacco export, and asked the Senate authorization to put into circulation six million nominal Dominican pesos in paper money. Of this amount two million pesos would be employed to substitute former deteriorated paper money under use, and four million only during the tobacco season to alleviate the strenuous situation of the scarce national currency during the tobacco season and its consequent transactions. After the season the four million nominal pesos would be recalled.

(Baez) dispone la creacion de un proyecto para la monopolizacion del negocio del tabaco, el cual incluia un abierto despojo de comerciantes y agricultores. Es por esto, que el mismo tiene como fin aumentar la cantidad de moneda nacional circulante por el tiempo de la cosecha de tabaco unicamente, para lo cual solicito del Senado autorizacion para la emision de seis millones de pesos de los cuales teoricamente dos millones se destinarian a sustituir el papel moneda deteriorado y cuatro millones se pondrian en circulacion para rescatarlo tan pronto desapareciera la necesidad de moneda fraccionaria creada por el aumento de las operaciones de compra y venta de tabaco (Marrero Aristi 1957, vol. I:410).

Actually, Jose Gabriel Garcia (1968 vol. III:226-227) indicates that the control of the tobacco business was only a political stratagem of the Baez government against tobacco merchants whom the president thought dissatisfied with his political power. In addition, it was a strategy to transfer the profits of this lucrative enterprise to his own followers. The emission of nominal paper money became an ill monetary policy. To the already gold and silver currency introduced by tobacco exporters in view of the shortage of national currency, the government put into circulation in May, 1857 not four but eighteen million billetes (paper money). The devaluation of the national currency followed from this over-surplus of nonsupported currency--from an estimated 60 to 70 Dominican

pesos per peso fuerte; in other words, an ounce of gold was paid at \$1.43 national pesos. The value of exported tobacco descended in terms of international currency (pesos fuertes), and merchants and producers found themselves virtually ruined amid payments in national currency and low prices. Meanwhile, President Baez and his followers, including the Spanish, French and British consuls, received the gold and silver currency introduced by the exporters earlier (cf. Marrero Aristy 1957: vol. I:411).

...ampliada y extendida discrecionalmente por el senado consultor, en 2 de mayo de 1857 la facultad de emitir papel moneda acordada antes al gobierno, este en vez de cuatro hizo confeccionar diez y ocho millones de billetes, que repartidos para su venta entre diferentes comisiones encargadas de ofrecerlos al publico al precio fijo de 1.100 unidades por una onza, acabaron de precipitar la bancarrota, pues que se vieron inundados del funestro agente todos los mercados, con grave perjuicio del gremio agricultor, que era al que se fingia proteger al impedir el estanco periodico con que traficaban los agiotistas, porque habiendo principiado a vender por papel su cosecha de tabaco, cuando el cambio estaba a cincuenta por uno, vino a deshacerse de ese papel cuando ya circulaba a mas de 68 3/4, experimentando la perdida consiguiente a la fluctuacion del ruinoso agiotage, que por otra parte fue productivo a los partidarios del gobierno, beneficiados en el reparto que se hizo y que la opinion publica califico de bautismo (Garcia 1968, vol. III: 227).

It was not until 1859, that the tobacco production was partially reestablished in the Santiago and La Vega provinces, with a harvest of 60,000 qq. which accounted, in additon to some coffee, for the national export of that year. Meanwhile, Baez had enriched himself while paralyzing the tobacco production in the Cibao, and occasioning the popular revolt of 1857 as a reaction of his tobacco and monetary policies which resulted in the short lived Moca constitution of 1858.

Because of the export nature of the tobacco commodity, the development of its industry is heavily dependent upon international markets. Without good field prices, financial subsidies to exporters coming from international merchants, and the demands of manufacturer buyers, the tobacco boom would have been stopped. Thus the tobacco production was virtually contingent upon the international market; especially since the tobacco national market was small, and rural

Inhabitants constituting the greater percentage of the population could very well produce their own andullo tobacco without need of a national tobacco industry. This contingency of the tobacco commodity upon international customers is best expressed in the common remark of Cibao peasants: *ei taibaco noi se come* (tobacco can't be eaten).

After the official lifting of the tobacco monopoly in 1864 (Coleccion de Leyes 1864:290), Lluberes (personal communication) estimates that 15 export houses --only two of them run by Spaniards, the rest by Germans, Dutch, Danes and Englishmen--started operating in Puerto Plata. That market conditions had improved in relation to the conditions existing during the Baez government and even during the re-colonization of the Republic after Santana ceded it in 1861 to the Spanish government, can be inferred not only by the increase in production and the number of operating export companies in the Republic, but also from the high export taxes with which the tobacco was being levied. According to a July 1847 export law, tobacco leaves paid 50.00 pesos fuertes per quintal, while mahogany only paid 5.00 pesos fuertes per thousand feet. In 1853 and then in 1858, the 1847 law was revised, but while other commodity's taxes were augmented, tobacco was not surpassed by any (cf. Coleccion de Leyes 1847:#1:424; 1853:#2:490).

The social organization between the peasant producers and the export houses in the second half of the XIX century had two main characteristics: (i) it is strikingly similar in its structure to the present one existing between producers and buyers of criollo tobacco; and (ii) it was composed of multiple networks of operating units. In 1895, Bono noted that this social organization included members of all social classes in the Cibao because the tobacco "*va del agricultor al corredor, del corredor al pequeno comerciante, de este al exportador, de este al comisionista, quien lo vende al fabricante*" (1964:380).

The capital to finance and purchase the tobacco harvest was guaranteed by international merchants from Germany, Holland, England and the Danish free

colony of Saint Thomas. They bought the tobacco to supply requirements from European manufacturers and in-between their purchasing and selling operations produce a commission profit of their own. As a matter of fact, the historical record is not sufficiently clear on whether or not some of these merchants (comerciantes or comisionistas) were at the same time tobacco manufacturers (manufactureros or fabricantes); available evidence seems to support that they were not with the sole exception of some German merchants who are reported to elaborate (elaboraban) their own purchased tobacco (cf. Alvarez 1955:97). The export houses operating in the Dominican Republic were either dependent representatives or semi-independent associates of the European merchants; the latter were in control both of the capital to purchase and pack the tobacco through their local export organizations, and of the international manufacturers market.

Most of the local export houses were staffed and run by foreigners and had well established political and economical influence in national politics (cf. Hoetnik 1971:121). Once the capital was transferred by the international merchant houses to their organizations in the Dominican Republic, or at least was secured, the operations of the export merchants started. They had local merchants, most of them living in the cities, who moved to the countryside near the tobacco peasants. These local merchants by themselves, or usually with the help of middlemen (corredores) and small local business establishments, advanced money among neighboring peasants and friends to finance their tobacco harvests and help in any other need the growers might have. Through this strategy local merchants guaranteed clients who will sell their crops to them.

Lo que proporcionaba el capital (era) la certidumbre en el capitalista de que habia una riqueza comercial sobrante en los conucos de facil venta y que en cuatro o seis meses estaria a su disposicion... Habido el avance en San Thomas, Inglaterra, Alemania u otra parte, cade comerciante al por menor, por si o por corredores y sucursales se establece cerca de los agricultores a hacer un servicio parecido al de Courcelle Seneuil de los Bancos Escoceses. Da dinero, lenceria, quicalleria, u otros valores al labrador, mediante un agio consentido y este aplica este dinero y demas

objetos a sus necesidades personales y a las de sus cultivos con mas o menos juicio, mas o menos fortuna (Bono --1881-- 1964:196-197).

This advancement of money encouraged the circulation of money for small business purposes. Because of the absence of any financial security of the peasant other than his crop, and the informal character of the transactions, high interests were adjoined to the advancements with harmful consequences for peasants and small merchants.

Ninguno de los contratos toma seguridades para evitar o castigar la mala fe reciproca, no hay titulos hipotecarios ni quirografarios, todo se reduce a cuentas corrientes al descubierto, muy mal llevadas por el comerciante que ni siquiera doble ni copia da al agricultor. Esta falta de seguridades mutuas, ponen la operacion avance al tabaco en la categoria de los prestamos a la gruesa, hacen por lo menos muy subido el interes de los valores avanzados que al fin son su ruina y la del pequeno comerciante... A pesar de sus muchos defectos el avance da un empuje extraordinario al cultivo del tabaco y a las demas industrias que concurren a su extraccion... el (avance) es quien ha interesado a la clase mas ilustrada que hoy preside a su apartado, seleccion y enfardelaje (Bono 1964:197).

The local tobacco merchant, or sometimes his middleman, buys the tobacco from the peasants who transport it to the former's warehouse. There it is inspected by the local merchant himself, and loosened and classified by women. Formerly the peasant classified the tobacco in his own plot before selling and delivering it to the warehouse. But peasant's harmful commercial practices forced the export houses to transfer these obligations to their dependent warehouses thus further sub-dividing tobacco labors on them. Under the risk of losing European markets, because of frequently received rotten tobacco, the operations of classification were left in charge of urban workers under the direct responsibility of the local merchant.

Reflecting upon the new practice of inspecting and selecting the tobacco in the warehouses, and justifying the new division of labor between peasants and the warehouse laborers, and within the latter itself, Bono noted:

El comerciante veterano hoy compra el tabaco en tongadas y bajo su inspeccion inmediata, jornaleros urbanos casi todos mujeres proceden

a las clasificaciones como en taller profesional regulado. Esta nueva combinacion... esta empleando grupos antes ociosos por falta de demanda de trabajo apropiado a sus aptitudes y que se ofrecen por salarios baratos; ha ensanchado el tiempo del agricultor que lo aprovecha en otros trabajos; emplea mano de obras mas obedientes, mas inteligentes, inspeccion severa de personas conocedoras de los gustos o exigencia del consumidor europeo, de los desperdicios de las taras, de los de embalaje, de las fermentaciones o curas que la rama necesita despues de las de troje ordinaria, de los falsos gastos, de la susceptibilidad de las hojas, etc. (--1881--1964:198).

It seems probable to infer, although there is no conclusive proof from the historical record, that once the tobacco was classified, cured, and packed in the warehouses, the export firms took over once more directly. Arrangements to transport the tobacco to the ports (Puerto Plata or Santo Domingo) and for later shipment abroad were made; market possibilities and tobacco prices were discussed and agreed upon with their international firms and with European manufacturers; pending business with the tobacco merchants solved, and relations with the capitalist international firms preserved.

In all, Bono estimated for the 1882 tobacco season the figure of 150,000 persons directly involved in the tobacco industry (1964:269). This tobacco population seems inflated since in 1871 Hoetnik (1971:20) cited the total population of the Republic ranging between 150,000 and 207,000 inhabitants. Nevertheless, it can safely be said that the labor population of the tobacco industry was high. It included the main operating units of the industry: (i) agricultural and warehouse peones (wage laborers); (ii) peasants and middlemen; (iii) big landowners (very rare mention of them is made on the historical record); (iv) local tobacco merchants; (v) export merchants of the export houses. And beyond the national geographic limits, the international merchants monopolized both capital and market thus selling their locally purchased tobacco to buying European manufacturers.

The effective transformation that the tobacco industry brought about in the Cibao region can be seen above all in its own peasantry. Contrasting the

Cibao inhabitants with those from the South, Guridi noted in 1884 that the latter gave indications of economic misery, labor apathy, and laziness. Meanwhile, Cibao peasants enjoyed an over all economic well-being with even signs of luxury and material comfort.

Pero por el sur, es decir en las jurisdicciones de Santo Domingo y Azua, pues la provincia del Seybo fue siempre mas ganadera que agricola, acontecio todo lo contrario. En vez del movimiento, lujo y hasta comodidades de los campos del Cibao, apatia, holgazaneria, miseria y casi desnudes: en vez de la limpieza y el orden de los conucos y alrededores de las casas de viviendas que se observa en aquellos --desarreglo, montes de arbustos y yerbas silvestres, asi como una curiosa variedad de bejucos entrelazados en los platanales, cafetos y demas arboles utiles (1955:410).

Apparently, the striking exception to the relatively prosperous and active tobacco peasantry were the agricultural and urban wage laborers working for big landowners and in the tobacco warehouses. Without their own conucos to crop, they were only one step away from animal life, and in total dependence on their masters and employers. Their injurious poverty contrasted with the well being of big landowners and of export and local merchants. Keyn graphically described the poverty of some of these rural wage laborers in relation to the affluency of one export merchant, don Jose M. Glass, of Santiago (cf. 1968:29-30).

As a consequence of the affluency of the tobacco industry, regional differences grew in the nation. Santiago and other Cibao cities like Puerto Plata and La Vega, on the one hand, challenged the social, political, and economic prerogatives of Santo Domingo, the capital, and the southern region of the Republic. The preponderance of the Cibao region became outspoken and virtually unchallenged until the boom of the sugar industry at the end of the nineteenth century which coincided with the decline of the tobacco industry (cf. Hoetnik 1971, for the gradual transference to the sugar economy).

Already in 1812, Heredia y Mieses referred to the striking poverty of the capital city (1966:165). And in 1871, Hazard observed the tragic economic impasse of Santo Domingo in which "no hand of progress" was observable thus leaving

the capital in similar conditions to the ones prevailing there during colonial times (cf. Hoetnik 1968:31). It was during the Constituent Congress of Moca in 1857, that Bono proposed the federal system of government for the Republic. Although there was no differences of religion nor of language or laws, the interests were different he argued; it is not that the Cibao does not want to cooperate with the southern provinces, but that in this way emulation and competence will be fostered (1857--1964:105-113). By 1860, the Cibao supported by its tobacco industry was referred to as the most productive province in the Republic and the only one with a commerce enjoying the privileges of international credit; these circumstances "despertaron en los habitantes del Cibao la idea de separacion y el deseo de constituirse bajo un sistema federal... y se establecio la diferencia entre dominicanos y cibaenos (Alvarez 1860:16 and 20).

Tobacco Decline

Approximately 100 years after its origin, the tobacco industry declined. In 1879, Luperon attributed the decline in tobacco production --from an estimated 125,000 to 35,000 qq. -- to crop failure because of excessive rain. But in 1882, President Heureaux seemed to discredit this opinion and to agree with other observers by blaming the producers for the critical situation of the tobacco crop in international markets. He commented in a private letter: "...le dire que el tabaco dominicano hubiera conservado su fama y supeditado al brasilero y colombiano si les cultivadores del Cibao hubiesen sido mas celosos de su pervenir" (cited in Hoetnik 1971:27). Paradoxically, tobacco's national social and economic advantage turned to be its greatest international hinderance: the complex network of units involved in its harvest and care.

One of the greatest and most difficult problems of tobacco producers is to maintain an unchanging standard in the quality of their product. The constant variety of flavor and aroma of the tobacco leaves guarantees the buyer

manufacturer its blending. The standard quality of the tobacco relies upon variables of the natural environment (soil, rain, and weather) as well as the social environment in such activities as selecting, curing, and packing the tobacco. But the social organization of the tobacco industry in the nineteenth century augmented considerably the number of independent hands caring for the tobacco. This technoeconomic feature is probably associated with two dependent variables.

First, the fact that the tobacco production came from small plots and not from tobacco plantations like in Virginia, U.S.A. The coordination of these plots became more strenuous and complex by the mere disarticulated force of the great number of units to be integrated in the national distributive organization.

Second, the absence of great capital investments in processing equipment by the tobacco manufacturers like in the case of the sugar industry. The Cibao exported tobacco as raw material to be processed in European countries. Thereby the presence of huge capital investments on a long term base were not necessary. They would have implied the elimination of small producers and their subsequent substitution by large tobacco estates which could guarantee both the necessary supply of the commodity and the protection of the investments to capitalist organizations. In addition, it would have also signified the elimination of all independent units in the distributive system of the tobacco industry. In any case, the complex procedure of internal marketing continued and opened up opportunities for fraud and price speculation which finally ran Dominican tobacco out of European markets.

The national operations of the tobacco industry were insightfully classified by Bono as socially and economically "democratic" in nature because of the large labor force required for its harvesting and processing, and the profits it provided to all those involved in the industry's operation. At the same time, the national government in 1889 recognized that besides the economic

factors so beneficial in the tobacco harvest, the harvest and marketing of this crop "crea verdaderos ciudadanos libres por sus costumbres y educacion, porque cada cosechero es propietario y aun sus empleados subalternos conservan el principio de ciudadano en el genero de ocupacion que tienen en la elaboracion de dicho fruto" (cited in Hoetnik 1971:27-28). Meanwhile, the cocoa (and to a certain extent the coffee) was characterized by Bono as oligarchic since it required few laborers and great extension of land and capital to provide adequate profits to the producer (cf. 1895 --1964:363). Recently, the Dominican sugar industry has been classified by Hoetnik as "imperialist" because of its great extensions of land, the proletarianization of labor, and the dependence on huge foreign capital investments (1971:119).

Nevertheless, it was this labor democracy which seems to have brought the tobacco decline. Not only by the careless labor of the producing peasants, but above all by the treatment tobacco leaves received during classification, curing, and packing by warehouse laborers, local merchants and export merchants. As previously mentioned, European merchants and manufacturers lost their confidence in the Dominican tobacco and discontinued their transactions with the export houses. Export and prices went down, and peasants started planting their plots with cocoa, coffee and other crops. Tobacco supremacy lost ground to these booming products, and in a few years to the omnipotent sugar industry in the south.

Los selectores, empacadores, enseronadores y exportadores de tabaco abusaron de la paciencia de nuestros marchantes alemanes, y estos al fin cansados de nuestra malicia, se negaron a reconocerle al tabaco cibaeno las sobresalientes cualidades que la naturaleza, ayudada del esmero, le habian dado (Bono --1895-- 1964:361; cf. 197-198, 269, 279, 380).

In this perspective, the decline of the tobacco industry coincided but was not caused by the beginnings of the sugar industry whose development took place in the southern and eastern provinces after 1870; especially around the

cities of Santo Domingo and San Pedro de Macoris. For instance, Hoetnik (1971: 22-23) reports that from 1875 to 1882 thirty sugar estates (haciendas de cañas) started operations in the Dominican Republic. Twenty seven of the thirty estates were located between Azua and San Pedro de Macoris in the south coast of the country, while only three of them, the smallest according to the writer, operated in Puerto Plata. The capital investments came from Cuban families (i.e., Ros) emigrating from the neighboring Island because of the independence war being fought there, and from Italian (i.e., Vicini), German (i.e., Bass, Smidt, Hachtmann), and English (i.e., Read, Fowle, Hatton, Stocks) firms. These investors were not those formerly running the tobacco export houses (i.e., Roth, Waltading, Zeller, Bothet, Dubocq, Breffit, Stubbe and Jandes), nor were they investing in the same zones or the same amount of capital (cf. Hoetnik 1971:32).

On the contrary, while sugar production increased in the south and eastern region of the country, in the Cibao itself production was diversified with the presence of coffee and cocoa. With the decline and fluctuation of tobacco prices, peasants came to consider the sole dependence upon this crop as an excessive risk. The advice of Luis Castillo overran the social considerations of Bono about tobacco harvest's democratic nature:

Ya lo hemos dicho. Siembrese tabaco pero siembrese mas cacao, mas cafe, y vease el tabaco no como fruto de principal importancia, ni de primera necesidad para el desarrollo del comercio, sino como una pequena arteria que contribuye al sostenimiento de la agricultura, que contribuya al sostenimiento de los agricultores que laboran en pequena escala (Castillo 1895, in Bono 1964:402).

But neither the loss of confidence in international markets in relation to the Dominican tobacco, nor the diversification of agricultural production in the Cibao eradicated the tobacco production. Still in 1890, it was considered the "principal commodity" of the Dominican agriculture. For that reason the national government invested \$30,000.00 for the establishment of model farms for the harvest of both tobacco and cotton. (Collección de Leyes 1890:448).

Still the previous year, the government approved a project to Farensbach by means of which "este se comprometia a fundar dincas o granjas modelos en cuatro o mas lugares, a experimentar con nuevas semillas de tabaco y a dar instruccion sobre estos experimentos. Farensbach recibiria 75 centavos por cada quintal exportado; cuando el precio subiera a 15 pesos por quintal, gracias a las actividades de Farensbach, el gobierno levantaria un derecho adicional que seria entregado a Farensbach" (cf. Hoetnik 1971:27). And in 1894, President Heureaux trying to further protect the quality and the European markets of the Dominican tobacco, approved a decree in which both technical and agricultural guidelines were legislated upon peasants and warehouses, (Coleccion de Leyes 1894:281).

After the temporary loss of its European markets in the late 1870's and early 1880's, the tobacco now with official help was able to recuperate its markets. For instance, from 1878 to 1879, the tobacco exported descended from 120,000 to only 35,000 qq., (cf. Camacho y Tejada 1971:21). But by 1886 once again the export figures are up to a record high of 175,636 qq. Seed uniformity, and standard classification and processing, probably were the main reasons for this revitalization of the industry. Nevertheless, the sugar era had begun and the tobacco boom became stabilized; meanwhile, the Cibao divided its lands among tobacco, cocoa, coffee and other agricultural products.

CHAPTER III

PRODUCTION AND EXPORT OF DOMINICAN TOBACCO

Ecological Base

Natural Environment

The tobacco habitat is highly dependent upon ecological factors such as temperatures, rains, soils, and plagues. In fact, these variables are more determinants of its flavor, perfume and combustion than handling methods and fertilizer treatments. The tobacco plant is not only sensitive but also conservative: it adapts to temperatures neither too hot nor too cold; to soils neither too sandy nor too clayish; it needs water, but not too much nor too little.

The Dominican tobacco commerce both for the national and the international market is derived from *Nicotina tabacum*. Its market value depends essentially on its variety, and on the quality and texture of its leaves. These elements determine the flavor, and the combustion of the tobacco leaves, and thereby its market value as well.

In the Dominican Republic, the main tobacco harvested whether for national consumption (9.49% of the national production for 1971), or for export, is of the dark air cured class. The former includes tabaco de olor (smell tobacco) with its most important sub-varieties, Chago Diaz and Quin Diaz; in addition in the last three years the harvest of Burley tobacco has increased for national consumption not without political turmoil. On the other hand, the export tobacco embraces two varieties, the traditional tabaco criollo (creole tobacco), and starting in 1962, tabaco piloto cubano (Cuban seed tobacco). The former includes a number of sub-varieties such as Amarillo parado, Punta de lanza, and Amarillo planchado.

It is pertinent to notice at this point, that the present study is based on the export tobacco production and its manufacture exclusively; in other words, with the production and packing of criollo and Cuban tobacco. The volume of the export industry is evident when looking into the statistics. In 1970, for instance, the international market received 86.26% of the 446,370 qq. of tobacco harvested in the Dominican Republic. Of the total national production the amount exported was: 329,781 qq. of criollo tobacco (73.88%); and 45,632 qq. of Cuban tobacco (10.22%). Of the remaining 70,957 qq. of the tobacco harvested during that season corresponding to olor tobacco, only 2.16% was also exported and the rest consumed in the national market.

Production and Export of Criollo and Cuban Varieites of Tobacco: The Formal Aspects

This sub-section includes a detailed consideration of agricultural and market factors of both Cuban and Criollo tobacco. In this way a clearer picture will appear hopefully of the social organization resulting from the flow of the tobacco from the fields to the international market. Interestingly enough, this process is known as cuidados culturales (cultural cares) in the Dominican Republic, for they embrace all those activities which the tobacco receives from man in its productive and market stages.

(I): Cuban Tobacco:

The Cuban seed was introduced in the Dominican Republic in 1962 with the help of planters and processors from Cuba who transplanted its relatively complex technology to the neighboring Republic after Castro took over in Cuba. The interest of the Dominican national government and of the at the time subsidized Fetab Inc. Cooperatives, was to capture the Cuban tobacco market lost by the Cuban government in the United States.

In 1970, the production of approximately 350 Cuban seed harvesters, ascended to 45,632 qq. (1 quintal= 50 kilos = 100 pounds) in an estimated

34,125 tareas (in 1963, the production was only 3,500 qq. --0.27% of the national tobacco production-- in 890 tareas of land, cf. table 12). Thus, the estimated yield was 1.5 qq. for tarea of land. Dominican planters have absorbed the elaborate technology of planting and preparing this tobacco due to the benefits on account of the high prices which are paid for this tobacco. However, the market is very restricted because of the high quality and prices which the Cuban tobacco receives; this constitutes a limiting factor to its production. The principal exportations are made to the United States, where buyers cannot get the tobacco from Cuba, and to the Canary Islands which processes and re-exports it to the United States.

Production:

Although the planting and harvest cycle is less than the one of criollo tobacco, peasants have to work harder with Cuban tobacco. Seed beds should be watered from the second half of September to the last days of October in order to make transplantation from the first days of November to the middle of December. Planting is made in rows at an average distance of 32 inches between the rows by 11 inches between the plants, which permits a population of 2700 plants for each tarea and will secure under ideal conditions a production of two quintals for each tarea of land.

When planting, first application of fertilizer is made, determining the quantity and the formula as per soil type. Twenty days after planting, weeding takes place and then another dose of fertilizer is applied. Immediately, aporque (hilling) follows, meaning to clot the plant's trunk, applying irrigation. Forty days after planting the tobacco, unbottoning is made and a week after that picking out suckers, starting crop 55 days after planting.

Harvest:

Harvest starts with the two first leaves, the lower ones, which constitutes the class denominated libre pie. A week after that harvest continues with

the next two leaves dominated uno y medio. Then, each week, the central leaves are cut out until finishing with the last two leaves in the top called coronas.

The field price of Cuban tobacco remains the same during the tobacco season. Usually it is directly stipulated between the producing peasant and buying export houses in the form of a contract; the agreement also specified technical and financial assistance. While some companies pay the same price for all classes of leaves, others prefer to pay a different price for each class of leaf. The rationale behind this is one of selection according to different types and yielding capacity of the harvest they buy; the export house will sell the tobacco classified at different prices and its profits will depend on this.

Curing and Bulking:

After the crop, the tobacco is tied up with strings (sartas) in leaves which are hung up in the curing house, remaining there during 45 days, after which the leaves are expected to be completely dried. When tobacco is completely dried it is taken down and bulks (trojas) are prepared. It remains there for 40 days more of cure, or fermentation. Further tobacco is classified and packed in hampers and transported to warehouses where it will be the object of the processes of selection, curing, stripping, drying and packing.

Production Costs:

Cuban tobacco harvesting costs and profits per tarea vary from community to community and depend on whether the tobacco is harvested in dry or irrigated fields. The Tobacco Institute and the Agricultural Bank have estimated for the 1973 season, the following average costs and profits per tarea in the Cibao towns of Villa Gonzalez, Navarrete, El Ingenio, and La Canela; While Cuban tobacco cost for an irrigated tarea of land from preparation of the land until packing is estimated to be \$50.00 and the net profit of \$24.25,-- in the same zone profit estimates decreased considerably for non irrigated fields: production per tarea

is 1.5 qq; expenses per tarea \$41.21; average sale price \$40.00 per qq., and profits per tarea \$16.73. A sensible loss of \$7.52 per tarea (cf. Instituto del Tabaco 1972 b:67).

TABLE 9

FINANCIAL COST PER TAREA OF IRRIGATED CUBAN TOBACCO

ACTIVITY		COST
1	Land preparation	\$ 3.00
2	Seed bed costs or seed buying	2.30
3	Planting	3.00
4	First watering	2.00
5	Purchase of combustibles	1.75
6	75 pounds of fertilizer (\$4.00/qq.)	3.38
7	10 pounds of pesticide (\$16.00/qq.)	1.60
8	Use of <u>cultivadora</u>	0.50
9	Hilling	3.00
10	Second watering	1.50
11	Unbuttoning	0.30
12	Three suckerings (\$0.40/each)	1.20
13	Purchase of 150 strings (\$1.00 per 100 strings)	1.50
14	Third watering	1.50
15	Recollection of 150 strings	6.00
16	Tying up 180 strings (\$0.25)	3.75
17	Repairs of curing house	2.00
sub totals.		\$40.00
18	Repollos	
	cleaning of repollos	\$ 1.50
	pesticides and its applications	0.25
	purchase of 50 strings	0.50
	harvesting, tying up, hanging up	2.75
sub totals.		\$ 5.00
19	Peasant contribution--five pesticide applications	\$ 0.10
	pulling out of seeds and watering	0.20
	transplanting of 300 small plants	0.20
	two fertilizer applications	0.20
	two suckerings	0.30
	-repollo's expenses	2.50
	hanging up, bulk, hampering	1.50
sub totals.		\$ 5.00
Summary:		
	total production in quintals	1.70 qq.
	average sale price per qq.	45.00
	total production in RD\$	76.50
	expenses per tarea	50.00
	loan interests (8% for seven months)	2.25
	profits	24.25

Source: Tobacco Institute 1972 b:69.

The cost of the curing house for Cuban tobacco is the single most expensive investment facing the producers. A curing house of 42 x 36 feet ranges in price from \$200.00 in Cotui, La Vega, and Dajabon to \$571.50 in Bonao. As a matter of fact, it is most relevant to analyse the economic pressure of this and other producing costs upon the producers. Although no statistics are available, there is sufficient evidence to sustain that the great majority of Cuban tobacco producers are not minifundist peasants, but middle, entrepreneur, and latifundist landholders. The lack of production credits among minifundist peasants and the following variables seem to explain this significant phenomenon. The variables are: (i) the high cost of a Cuban tobacco curing house (an average criollo tobacco shading house (rancho) does not normally exceed \$100.00; (ii) the higher cost of production per tarea of Cuban tobacco when compared with criollo tobacco (cf. tables 9 and 14); (iii) the lack of irrigated land among minifundist peasants shrinks the expected profits from a tarea of non-irrigated Cuban tobacco below that of a non-irrigated tarea of criollo tobacco; (iv) the additional time and labor that the Cuban tobacco requires during harvest and curing time relative to that of the criollo tobacco; (v) finally, the fact that criollo tobacco is traditional in the Cibao region and also requires less labor expertise and crop risk than the Cuban tobacco.

Processing:

The processing of tobacco *piloto cubano* is a very delicate and costly operation. It requires much technology and supervision and abundant employment of labor. It starts with reception in warehouse in hampers previously selected by classes, under the supervision of buyer's technicians. In this phase class and quality are examined and then tobacco is received paying to the grower as agreed on the contract previously signed. At this moment the operation of loosening starts; the inferior types are taken out of the strings and taken to the bulks in leaves and each group in its class, where the process of fermentation

starts.

Loosening and pre-selection is another operation by which the upper types--libre pie, uno y medio, centro, corona-- are taken out of the cerones and are removed from the strings. Specialized workers make a sub-classification of each type according to the size of the leaves, to its measure from 7 to 9 inches, from 9 to 12 inches, or more than 13 inches. Leaves with less than 7 inches, which usually are few, or those which are ruined or spotted, fall within the classification of colas and placed in bulk just as the capadura (suckers) and the sandleaves (first leaves), according to class and in leaves, to be fermented.

Fermentation of all classes is done in bulk well identified bearing cards where it is indicated the zone where the tobacco comes from, the class and also periodically is written on it the temperature of the bulk. The trojas are turned over whenever tobacco temperatures increase (coge fiebre). This process lasts for approximately 40 days, after which tobacco is ready for selection. Previously, tobacco had been wet because of the field moisture; by the bulking process the moisture evaporates by the heat resulting from the leaves grouped together.

Selection process is very laborious and classification is made for leaves and classes. When classified, women workers strip the tobacco leaves through a series of delicate manual operations. At the end of this process, the tobacco is dried and then packed for port shipment. Normally, the packs (pacas) go by trucks either to Puerto Plata in the north coast, if the shipment is for Europe, or to Santo Domingo in the south, if the shipment is for the United States.

With this bulking process, the tobacco suffers a shrinkage (merma) in weight of approximately 10% and another 20% with stripping. After packing shrinkage is a minimum, if it is exposed to a good process of fermentation. The reduction in weight is taken care of in the selling prices.

Handling process costs are high. From a number of interviews it can be

estimated to be oscillating between 45 to 50% of the green tobacco cost. Other costs raise the total expenses to an 80% of tobacco's final cost; among them, field price and transportation are important.

Price Structure:

For sales purposes Cuban tobacco is classified usually into two types which are sold to different markets: centros and capaduras. Within the category of centro the following sub-types are sold separately:

- (i) Bandas: the leaf divided in two bands starting from the stem, without stripping. It is generally a long leaf with thin veins and good texture. It is principally exported to Canary where it is stripped and used as binder for cigars.
- (ii) Colas, leaves with less than seven inches or ruined or spotted, used as cut-tobacco for cigars or cigarettes. It is sold to Canary and the United States; in some cases to local markets.
- (iii) SHS, this is the cut-tobacco which is taken out from stripping of good quality as it comes from a very cured tobacco, and is sold for cigars or cigarettes manufacturing to Canary or the United States.
- (iv) The long-fillers (largos), which is the long leaf, well cured and of the best quality; like previous ones, it is sold in the United States and the Canary Islands.

Centros generally constitute 70% out of the total Cuban tobacco production. Its average sale price for a quintal of 100 pounds ranges between \$100.00 to \$122.50. The type reaching the highest price is the long-filler which is sold at a price that goes from \$130.00 to \$160.00 for a quintal of 100 pounds. Long-fillers constitute approximately 75% of the centros. The colas embrace 20% and the other sub-types 5% of the centros. The lowest prices are paid for the colas which are quoted at prices under \$44.00 for a quintal of 100 pounds.

The centros constitute 70% of the tobacco production, the rest is named capadura. Capadura tobacco is used as cut-tobacco, for cigars or cigarettes and

is placed on the Canary Island principally, reaching average quotations from \$30.00 to \$45.00 per quintal of 100 pounds. Capadura is convenient for manufacturers who have to make the stripping. The advantage of capadura is that as the stern is little it has a good yield when stripped by machine, depending on the machine, and it introduces a 75% of ready filler. It is aromatic tobacco very good to give flavor to cigars blended with other types of filler (centros).

Financing:

Most Cuban seed harvesters receive financing from some processor companies, which guarantee a fixed price by contract, even before the planting of the tobacco. Others receive financing from the Agricultural Bank through the Tobacco Institute, or from commercial banking generally with the guarantee of the buyer companies.

Loan interest ranges between $8\frac{1}{2}$ and 9 % annually according to the financial source. Financing is generally made under the supervision of qualified agronomists and based on the estimates of the crop's value; they vary from 50 to 75% of the crop's value.

It is safe to maintain that all Cuban seed growers are receiving financial assistance in some way or another. This situation contrasts with the one prevailing among criollo tobacco growers, among whom financial assistance is practically unknown because of lack of guarantees for the loans. Also differing from what is usual with criollo's tobacco practices, middlemen and local packers are non-existent between the producer and the export companies dealing with Cuban tobacco.

TABLE 10

PRINCIPAL SOURCES OF FINANCE FOR CUBAN SEED PRODUCERS, 1970

ORGANIZATION	# OF GROWERS	TAREAS
Agriculture Bank	62	6,490
Secretary of Agriculture	99	3,168
COPATA (private processing company)	108	9,831
TOTALS	269	19,489

Source: Casals Victoria 1972:14.

TABLE 11

SHARE OF EXPORT COMPANIES IN CUBAN SEED EXPORTS (ESTIMATES) 1970 (*)

COMPANY	QUINTALS	%	US\$	%
FETAB	6,661	(33.6)	615,786	(38.0)
QUISQUEYA	1,487	(7.5)	152,326	(9.4)
D.T.M.	4,283	(21.6)	350,026	(21.6)
Leon Jimenez	463	(2.2)	24,307	(1.5)
E.T. Tropicales	2,875	(14.5)	145,844	(9.0)
COPOTA	2,082	(10.5)	242,453	(14.9)
Hobeeka	615	(3.2)	98,850	(6.1)
Manipuladora de Tabaco	1,388	(7.0)	56,717	(3.5)
TOTAL	19,827	(100.0)	1,620,489	(100.0)

(*Note: At the time of the field work (1972) the situation had changed considerably. Copata seems to be the leading buyer company while a number of these export houses like D.T.M. have gone out of business.)

Source: Roques 1972:12

Market Situation:

The principal problem for the exportation of tobacco piloto cubano is that long fillers are used in the manufacturing of expensive cigars which are sold to consumers at prices from \$0.50 to \$1.00. Hence, its principal market is the United States, where the high income and the symbol of success or prestige that those cigars represent is very esteemed within certain high income groups.

In Europe, the principal buyers are in the Canary Islands, where because of the low cost of labor, tobacco is manufactured and re-exported in cigars to the United States. England and Switzerland are practically the only two European markets for Dominican long-filler, but they buy it from Cuba. Opinion runs that on a matter of quality and prices the Dominican long filler could compete with the Cuban one in those markets. But it initially faces two difficulties: (i) manufacturers do not stop good commercial relations already established; (ii) besides, they do not like to change suppliers because of the risk of receiving different flavor tobacco affecting their blend. Blending is a matter of vital importance to the manufacturers to whom the export companies through their international firms sell their tobacco. The manufacturer is contingent upon

the client's desire for their tobacco flavor blends in order to maintain and protect a market for their final products.

(II): Criollo Tobacco:

Criollo tobacco represents a number of social contrasts with the Cuban tobacco. First, contrary to Cuban seed tobacco only a decade old in the Cibao region, tobacco criollo is identified with the Cibao region as far back as early XIX century, if not earlier (cf. Camacho y Tejada 1971:2). Second, while the Cuban seed tobacco is the work of an estimated 350 producers, most of them middle or big landholders --34,125 tareas were harvested in 1970 which gives an approximately minimum average of 97.5 tareas per producer-- criollo tobacco is the minifundist peasant's cash crop; among other reasons, because (a) it may be cultivated profitably on small plots; (b) it does not require technological expertise nor does it require as large a labor force as the Cuban tobacco harvest; (c) family labor may virtually supply all the labor needs of a conuco or a parcela; (d) small plots may yield a relatively high return (cf. table 31).

This variety of tobacco, like the Cuban variety, is usually called dark tobacco (tabaco negro) because of its dark leaves. Its vegetative cycle normally runs from 60 to 65 days after planting in contrast to the shorter cycle for Cuban tobacco (50 to 55 days after planting). The leaves on becoming dried present a dark brown color with poorer texture and different aroma than the Cuban leaves. Its lesser quality will produce for it a European market, mainly Spain, and will have to compete with Philippine, Colombian, and Brazilian dark tobacco in those markets.

In recent years the criollo tobacco production dropped from 433,751 qq. (95.81% of the national production) in 1963 to 329,781 qq. (73.88%) in 1970; and in surface dedicated to its harvest from 315,710 tareas (96.50%) in 1963 to 240,034 tareas (74.40%) in 1970. This drop is explainable in relation to the

diversification of production because of the beginning and expansion of the Cuban seed tobacco in 1963, and the increase of the national market and thereby the boom of the olor tobacco production (cf. tables 12 and 13).

TABLE 12

TAREAS HARVESTED ACCORDING TO DIFFERENT TOBACCO VARIETIES: 1963-1970

YEAR	TOTAL	CRIOLLO	%	DE OLOR	%	CUBAN	%
1963	327,145	315,710	(96.50)	10,545	(3.22)	890	(0.27)
1964	23,593	221,474	(93.87)	9,208	(3.90)	5,251	(2.22)
1965	246,795	220,240	(89.24)	16,159	(6.54)	10,396	(4.21)
1966	292,788	255,963	(87.42)	22,208	(7.58)	14,617	(4.99)
1967	298,766	241,919	(80.97)	33,714	(11.28)	23,133	(7.74)
1968	237,062	173,411	(73.15)	37,302	(15.73)	26,349	(11.11)
1969	306,484	230,862	(75.32)	44,417	(14.49)	31,205	(10.18)
1970	322,614	240,034	(74.40)	48,455	(15.01)	34,125	(10.57)

Source: elaborated from unpublished data of the Tobacco Institute.

TABLE 13

NATIONAL PRODUCTION ACCORDING TO TOBACCO'S VARIETIES: 1963-1970

YEAR	TOTAL	CRIOLLO	%	DE OLOR	%	CUBAN	%
1963	452,693	433,751	(95.81)	15,422	(3.41)	3,500	(0.77)
1964	326,438	304,282	(93.21)	13,484	(4.13)	8,672	(2.65)
1965	341,467	302,586	(88.61)	23,663	(6.92)	15,218	(4.45)
1966	405,103	351,666	(86.80)	32,522	(8.02)	20,915	(5.16)
1967	413,371	332,250	(80.37)	49,371	(11.94)	31,750	(7.68)
1968	328,000	238,248	(72.63)	54,624	(16.65)	35,128	(10.70)
1969	424,053	317,180	(74.79)	65,044	(15.33)	41,829	(9.86)
1970	446,370	329,781	(73.88)	70,957	(15.89)	45,632	(10.22)

Source: elaborated from unpublished data of the Tobacco Institute.
(in quintals of 50 kilos).

The decreasing trend of criollo's production will probably stop in coming seasons. As a matter of fact, in recent years, demand of criollo tobacco from European buyers --especially Spaniards-- has increased. Accordingly, the Tobacco Institute proposes for the 1972-1973 tobacco season (cf. 1972 b:4 and 7) an increase in the dark tobacco production of 100,000 qq. in relation to the 1971-1972 production; of this increase, at least 80,000 qq. correspond to criollo tobacco. This yielding increase is expected to be accomplished through the addition of 50,000 tareas to the harvest of these two varieties of tobacco, mostly fallow land. Following preliminary estimates of the Institute's director, the 1971-1972 season, ending in August 1972 yielded 420,000 qq. of criollo tobacco (cf. El Sol newspaper, September 7, 1972, pag.1) with a revenue of \$31 million dollars including Cuban tobacco export revenues. The number of tareas dedicated to criollo crop through the same season was approximately 236,530 tareas of land.

Production:

As Cuban seed beds, criollo's seed beds are prepared at the beginning of the rainy season, usually the end of September or the first week of October. Watering, shade, covering, and fertilizing care of the seed runs from 35 to 40 days until the plant is from 4 to 5 inches in height in the seed bed.

Planting starts at peasant's discretion in November and generally each seed bed provides plants for eight tareas. While a worker in one day uproots and waters new born plants (posturas) from the seed beds for an average of three to five tareas of land, another worker harvests one tarea in 4/5 of a working day. Planting is made in rows at an average distance of 39 inches between the rows by 20 inches between the plants, thus a tarea will include 25 rows with 48 plants each or 1200 plants. The average yield is 2 qq. per tarea, but in some tobacco zones even 3 qq. per tarea have been reported.

After planting, aporque (hilling) is made and the soil is immediately watered; it normally takes a worker one day for the hilling of one tarea. If

fertilizer is available, the first application is also made at this time. Irrigated tobacco harvesting requires two applications of fertilizer but on dry conditions (secano) one application suffices; on any conditions, one worker applies fertilizer to ten tareas in one working day. Fourteen to twenty days after planting, weeding (deshierbe) labor starts. The first weeding of one tarea will take approximately $1 \frac{1}{5}$ working day to a worker. The second weeding, following four or five weeks later and according to field conditions, only one day.

Around the fifth week after planting the tobacco unbottoning (desbotone) starts and is shortly followed by one of the two pickings out of suckers (deshije). A worker unbottons $11\frac{1}{2}$ tareas of criollo tobacco in one; but he deshija only $7\frac{1}{2}$ tareas in one day. Fifty to sixty days after planting the tobacco crop starts.

Harvest

Harvest starts with the lowest leaves of the plant denominated barresuelo (floor sweeper). Normally two weeks after the barresuelo, harvest continues without leaves selection as in the case of Cuban tobacco. Repollos (second born leaves) are the last leaves harvested. While barresuelo leaves will receive the lowest prices, the rest of the crop, without making distinction of leaves, receives the same price from the warehouses; proper exception of the repollos which receive prices as low as those of the barresuelo leaves.

Some agronomists estimate that 10% of the plants harvested become unproductive. Thus, a tarea of criollo tobacco has 1,080 productive plants at crop time; each plant having 22 leaves with a total of 23,760 leaves. If each string includes 150 to 165 leaves, then a tarea of tobacco criollo produces 145 strings (Cuban tobacco produces with irrigated fields 230 sartas; if the land is dry only 175 sartas). It is also estimated that three peasants collect 175 strings a day at harvest time.

Curing and Bulking

After the crop, the tobacco is tied up with strings by women working on

the floor of a nearby shading house (rancho). Each string is 6 to 8 feet long with an average of 50 rings holding from 150 to 165 leaves of tobacco recently taken from the field. Each sarta is then hung up by men in the shading house ceiling, thus permitting the leaves to dry out while naturally aired for at least three weeks. The shading house, owned by the peasants and located in their own plots, are like huts without walls and wide open. The men hanging up the tobacco strings are normally the same that have harvested it earlier in the day.

When the tobacco is completely dried it is taken down and trojas (bulks) are prepared. The bulking process, taking place under the shadow of the ranchos, lasts for about 40 days producing a little cure, or fermentation to the leaves. When a price is accorded with a middleman --who has normally been checking the harvest and lending money to the peasant-- the tobacco is packed in hampers; very rarely, does the peasant classify his own tobacco in order to sell it at different prices.

The middleman transports the tobacco to the warehouse subsidizing his operations during the tobacco season. In the warehouse, or in the local packer, the tobacco will be selected, cured, cleaned, dried and packed for export shipment.

Production Costs:

Criollo tobacco production costs and profits per tarea vary from community to community and depends on whether the tobacco is harvested in dry or irrigated fields. But while it is safe to affirm that Cuban tobacco is most frequently irrigated, criollo tobacco is not. Table 14 includes the estimates of costs and profits from the Tobacco Institute and the Agricultural Bank for the 1972-1973 tobacco season; it refers to a dry tarea of land harvested with criollo tobacco in the towns of El Ingenio, Villa Gonzalez, Navarrete, La Canela, Tamboril, Licey, Moca, Guazuman, and La Torre.

The criollo's shading house normally ranges around the 14 x 12 field yards (varas conqueras ; 1 vara conquera = 2.5077 m). Its capacity might cover 12

tareas of tobacco and its presence is essential for after crop operations like bulking, air curing (la colgada), hampering, and sun protection of the tobacco.

TABLE 14

LABOR	COST
1 Land preparation	\$ 1.50
2 Purchase of 1,380 seeds	1.38
3 Harvest of 1,200 small plants	2.00
4 50 pounds of fertilizers (\$4.50/qq)	2.25
5 5 pounds of pesticide (\$16.00/qq)	0.80
6 Two weedings	4.50
7 Unbuttoning	0.20
8 Two suckerings	0.25
9 Purchase of 75 strings	0.75
10 Recollection of 75 strings of tobacco	3.00
11 Tying up of 75 strings	1.12
12 Shading House repairs	2.00
sub-total.	\$19.75
13 Repollos pesticide and its application	\$ 0.25
harvesting, tying up, hanging up	2.50
purchase of 50 strings	0.50
sub-total.	\$ 3.25
14 Peasant's contribution pulling out and watering the small plants	\$ 0.25
transplanting 180 small plants	0.20
fertilizer application	0.15
pesticide application	0.30
suckerings	0.20
hampering	0.15
repollos's expenses	2.75
sub-total.	\$ 4.00
Summary:	
Total production in quintals	2.00
Average sale price per qq. (*)	\$23.00
Total production in RD\$	46.00
Expenses per tarea	27.00
Loan interest (**)	1.62
Profits	17.38

(*) During the 1971-1972 tobacco season the average sale price per quintal was higher: \$26.00/qq.

(**) Most peasants receive loans without financial interest from middlemen.

Source: Tobacco Institute 1972 b:58 and 59.

Processing:

The processing of criollo tobacco is not as laborious nor as expensive as that of Cuban tobacco. Although a delicate operation, it does not require much technology --as the presence of independent local packers selling packed tobacco to export houses proves; nevertheless, it does require abundant labor, but not specialized.

Middlemen, at their own risk, bring the tobacco to the warehouses or, in some cases, to the local packers. At this time the hampers are weighed (normally each hamper weighs one quintal with 60 kilos, but only 50 kilos are paid; the weight difference is attributed to the hamper itself plus dirt, moisture and stems of the tobacco) under the supervision of the warehouse owner or his equivalent. Supervision is tight for dryness of the leaves, and rotten tobacco. The operation of loosening the leaves from the strings is taken care of by women. Sometimes a pre-selection is made at this point between different types of leaves according to their length and texture.

Loosened and/or pre-selected tobacco goes into huge bulks. Fermentation is done in these bulks just as in the case of Cuban tobacco by turning the bulks over whenever tobacco temperatures increase. This process of forming the trojas and turning them over, lasts approximately 40 days or three turns. At the end, the tobacco is supposedly dry and ready for selection.

The selection process is laborious and requires tobacco expertise. During the field work some clasificadores (classifiers) in two different warehouses, emphasized that they could distinguish 17 types of criollo tobacco leaves; another one said he could go up to 21 classifications. But normally, five or at most seven types of leaves are selected. Once classified, the tobacco is dried and packed for shipment through Puerto Plata (90 miles from Santiago to the northeast); all export shipment costs are taken care of by the manufacturers just as in the case of the Cuban tobacco.

With the bulking process the criollo tobacco shrinks almost 12% of its field weight. If well treated in the warehouse, shrinkage during shipment overseas is expected to be minimal. Handling process costs are not as high as those of Cuban tobacco. They can be estimated to fluctuate around 10% of the tobacco cost to the export companies.

Price Structure:

Sale practices of the export houses vary from one to the other, and normally strict secret prevails in their business transactions with manufacturing buyers. Nonetheless, more frequently than not, the criollo plant with its 22 leaves is classified as producing three categories of leaves: barresuelo or lowest leaf (6% of the plant's leaves); centro or center leaves including the rest of the leaves (94%); and repollo or leaves born after the first harvest (normally 75 pounds of repollo leaves are harvested per tarea).

Most of the criollo leaves are used as cut-tobacco and as tripas (entrails) in cigarettes. They have become well known for their mild flavor resulting from soil exhaustion; the customary mal-practice of harvesting without fertilizers affects the presence of nitrogen in the soil which in turn affects the presence of nicotine in the leaf. This mild flavor makes criollo tobacco highly requested by European manufacturers for their blendings and tobacco mixing.

The central leaves are further classified for commercial purposes into sub-types 1, 2 and 3 depending on their length, texture, combustibility, elasticity, and aroma. Criollo's number 4 and number 5 sub-types come from barresuelo and repollo leaves, plus some central leaves of lesser quality. Yield average estimates vary significantly from one zone to the other. Normal returns probably are: 5% of #1, 30% of #2, 30% of #3, 25% of #4, and 10% of #5, per quintal of tobacco. In some cases a simpler division is employed by distinguishing only three sub-types of leaves; in this case the average yield per quintal will be: 10% of #1, 50% of #2, and 40% of #3. Furthermore, in other instances criollo

tobacco is classified in four sub-types thereby yielding averages which might be expected to be: 10% of #1, 25% of #8, 25% of #4, and 40% of #5.

The type reaching the highest prices in all cases is #1, which in 1972 normally was quoted from \$100.00 to \$110.00 per 100 kilos; under special circumstances it has gone as high as \$125.00. Sub-types #2 and 3 are normally on the average of \$90.00 to \$100.00 for 100 kilos; finally, sub-types #4 and 5 fluctuate around \$80.00 for 100 kilos.

Commercially, the selling price has to cover the tobacco costs and leave a profit margin. A conservative estimate of tobacco's cost to the export house and to the local packers is presented in Table 15.

TABLE 15

ESTIMATE OF TOBACCO'S COST TO EXPORT COMPANIES AND TO LOCAL PACKERS

LABOR	EXPORT HOUSE	LOCAL PACKER
Tobacco cost in the field	60.0%	60.0%
Primary labors	2.5	2.5
Shipment to warehouses	1.0	1.0
Middleman's commission	2.5	2.5*
Shrinkage in warehouse	9.0	9.0
Handling process	10.0	4.0
Administrative expenses	3.0	---
Shrinkage after packing	1.0	1.0
Financial expenses	9.0	9.0
Selling and shipping expenses	2.0	---

(figures represent per cent of final cost)

(*) Local packer's dependence upon middlemen is not as common as with export houses.

Financing:

Most financial help for the growing of criollo tobacco comes from unofficial and informal sources, mainly corredores (middlemen). They provide minifundist producers and sharecroppers from small landholders with advanced money on their crop for any use they decide pertinent, no matter whether it is a personal, family, or production use. Rarely does a middleman grant advanced money above 10 to 15% of the estimated value of a peasant's crop. Thus, they do

not sufficiently cover production costs or other household expenses of the peasants.

Another financial source for peasants is the Agricultural Bank, the Agriculture Department through its supervised credits, and the Office of Community Development. All of these are official organs channeling their production credits mainly through the Tobacco Institute. For reasons such as bureaucratic procedures, time delays in payment, and value perceptions on the side of the peasants, the efficacy of these programs is limited.

Market Situation:

The criollo tobacco crop is mainly exported to European manufacturers. The principal problems facing the export of this tobacco are: (i) its price increase; the Dominican tobacco has augmented its cost from 1963 to 1970 35.2% while in the United States its costs have gone up 26.2%, in Europe 45.7%, and in Africa 30.5% (cf. Casals Victoria et. al., 1972:31-32). This upward trend in its average cost is best exemplified by looking into one of its affecting variables, the tobacco cost in the field. While in 1962 the average sale price per quintal paid to the producer by the export houses through the middlemen was \$13.00, in 1972 it is \$26.00 per quintal; in other words a 100.0% increase in only ten years. If this upward trend continues Philippine, Brazilian, and Colombian dark tobaccos might displace Dominican tobacco from European markets.

(ii) The criollo export, as well as the Cuban tobacco export, is concentrated in two main markets, Canary Islands --with 42.35% of 1971 total tobacco export and 40.91% of the tobacco revenue-- and Spain --with 20.69% of the export and 16.99% of the revenue. Especially the Canary Islands manufacturers are known to be unstable buyers for they move from the tobacco of one country to that of another depending on low prices.

The most important requirement demanded by European manufacturers from local export houses of criollo tobacco are: low content of nicotine in the

leaves; homogenous processing and packing of the leaves in order to obtain standard quality and texture; low or even the absence of pesticide clorhine; low degree of moisture; and standard prices.

TABLE 16

TOBACCO LEAVES EXPORTED IN 1971

COUNTRY	KILOS	%	VALUE	%	AVERAGE PRICE PAID PER 50 KILOS RD\$
United States	2,392,550	9.31	253,739	12.53	53.03
Jamaica	91,424	0.35	92,304	0.45	50.48
Puerto Rico	3,023,739	11.76	2,395,875	11.83	39.62
Uruguay	32,945	0.12	31,731	0.15	48.16
W. Germany	543,932	2.11	404,013	1.99	37.14
Belgium	2,779,894	10.81	2,622,474	12.95	47.16
Denmark	359	---	339	---	47.21
Spain	5,317,789	20.69	3,439,078	16.99	32.34
Canary Islands	10,883,895	42.35	8,280,356	40.91	38.04
Holland	109,680	0.42	83,776	0.41	38.19
England	1,738	---	1,416	---	40.74
Portugal	5,000	0.01	3,600	0.01	36.00
North Africa	501,793	1.95	338,500	1.67	33.73
Equatorial Africa	12,000	0.4	8,880	0.04	37.38
TOTAL	25,696,747	100	20,239,733	100	39.38

(includes Cuban and Criollo tobacco)

Source: unpublished data from the Tobacco Institute.

CHAPTER IV

PRODUCTION LEVEL OF ARTICULATION

Operating Units

During the last decade the tobacco industry in the Dominican Republic has increased its export revenues from 14.7 million pesos (1 peso = 1 dollar), to 31.0 million pesos in 1972. At the same time, more than 70% of the national tobacco production is still being cultivated in the Cibao region. Thus, there is a special interest in the study of this crop's production, manipulation, and packing since it is one of the three high ranking export commodities of the country. The data for the analysis comes from the Cibao region where historically its production has been concentrated.

Any classification of rural operating units established upon the division and holding of land is arbitrary for it overlooks three basic aspects of agricultural operations: (i) the fertility and topography of the land; (ii) its ability to produce the chief cash and credit crop; (iii) and the presence of any landless unit like day laborers. Nevertheless, the study of a crop production, not in a community but on a regional basis justifies such classification.

Following the results of the 1971 census for 4,168 tobacco farms in the Esperanza, Villa Gonzalez, Bisoño and Santiago municipalities, the most important operating units involved in the harvest of tobacco in the Cibao region seem to be:

- (i) Minifundist conuqueros: operating units in privately owned plots ranging from one to 32 *tareas* of land.
- (ii) Minifundist parceleros: operating units in privately owned plots from 32 to 80 *tareas* of land.

- (iii) Peasant middle owners and agricultural entrepreneurs: their landholdings range from 80 to 800 tareas of land; the difference between them residing above all in business interests.
- (iv) Latifundists: operating units in possession of more than 800 tareas regardless of their entrepreneur interests.
- (v) Colonos: operating units sharecropping normally small plots under informal rent contracts.

TABLE 17

LAND DIVISION OF 4,168 TOBACCO FARMS IN THE CIBAO REGION, 1971

FARM AREA (tareas)	# OF FARMS	%	# OF TAREAS	%	AVERAGE SIZE OF FARMS (tareas)	% TOBACCO PRODUCTION
1-32	2,716	(65.16)	37,417	(9.70)	14	34.0
32-80	799	(19.16)	39,155	(10.15)	49	25.0
80-800	577	(13.84)	131,416	(34.08)	228	30.0
800 and more	76	(1.82)	177,520	(46.04)	2,336	11.0
TOTAL	4,168	(100.00)	385,508	(100.00)	92.5	100.0

Source: Secretariado Técnico de la Presidencia 1972: group IV, p.1.

TABLE 18

LAND HOLDING OF 4,168 TOBACCO FARMS IN THE CIBAO REGION, 1971

FARM AREA (tareas)	TOTAL FARMS	PRIVATE	%	RENTED	%	OTHER FORMS	%
1-32	2,716	1,136	(41.82)	925	(34.05)	665	(24.48)
32-80	799	327	(40.92)	246	(30.78)	226	(28.28)
80-800	577	411	(71.23)	92	(15.94)	74	(12.82)
800 and more	76	66	(86.84)	5	(6.57)	5	(6.57)
TOTAL	4,168	1,930	(46.30)	1,268	(30.42)	970	(23.27)

Source: Secretariado Técnico de la Presidencia 1972: group IV, p. 9a.

Obviously, the classification presented above is arbitrary. Others have been proposed. For example, the categories proposed by the Partido Socialista Popular (PSP) considers owners of 0 to 75 tareas as a poor peasantry; from 75 to 300 tareas as members of a middle class peasantry; from 300 to 1000 tareas members

of a bourgeois peasantry; and those owning more than 1000 tareas as latifundists (cf. El Nacional de Ahora newspaper, March 15, 1972; p. 7). The main difference between these classifications is based upon the cultural variables employed in the classification of operating units; for instance, the peasant's own distinction between a conuco and a parcela. In addition, a difference between a middle class peasantry and agricultural entrepreneurs (the P.S.P.'s bourgeois peasantry) is recognized. But although the difference between them is probably connected with the 300 to 350 tareas division mark, there is no available data to argue satisfactorily in this direction. Furthermore, it seems that the difference is not so much associated with landholding division as with cultural values: land exploitation with a purpose of profit maximization as opposed to a family subsistence enterprise.

Minifundist Peasants

Land as a Core Energy Resource

The plots of minifundist tobacco producers account for the highest percentage of the tobacco harvest in the Cibao; especially of criollo tobacco. If the figures from Table 19 are representative of tobacco farms in the Cibao region, minifundist plots represent 84% of the tobacco farms and control only 20% of the area harvested. Fallow and pasture land accounts for 66.44% of the land considered in the census, but non-agricultural land among minifundist peasants only represents 22.43% of their controlled surface. Tobacco harvested on small plots represents 59% of the national tobacco production, which indicates an intensive land use in sharp contrast with latifundios with only 11% of the tobacco production. Latifundios control 46% of the land surface, and account for 2% of the number of farms.

Minifundist peasants' main core energy resource is the land. Without either a plot or sufficient land to harvest they find themselves forced into being a dependent unit either as sharecroppers or as day laborers; especially

since they operate amid a cash market economy and are contingent upon the crop's yields and the extension of the plot for their income. When production returns are not enough, because of scarce labor land and/or poor technical means of production, the peasant has to subsidize his income by resorting to middlemen, to usurers, and to other operating units in control of financial resources. This ends any opportunity he had of maximizing profits.

TABLE 19

LAND USE OF 4,168 TOBACCO FARMS IN THE CIBAO REGION, 1971

FARM AREA (tareas)	TOTAL AREA	AGRICULTURAL LAND UNDER USE	%	TOBACCO LAND	% OF AGRI- CULTURAL LAND	OTHER CROPS	% OF AGRI- CULTURAL LAND
1-32	37,417	31,818	85.03	17,817	55.99	14,001	44.00
32-80	39,155	27,579	70.43	12,973	47.03	14,606	52.96
80-800	131,416	37,162	28.27	15,850	42.05	21,312	57.34
800 and more	177,520	32,834	18.49	5,625	17.13	27,209	82.86
TOTAL	385,508	129,393	33.56	52,265	40.13	77,128	59.60

Source: data elaborated from Secretariado Técnico de la Presidencia 1972: group IV, p.3.

The most common way to obtain a plot among minifundist peasants is by inheritance. Formally, all recognized (legítimos) children inherit equally and no distinctions are drawn between boys and girls. In actuality, however, the picture is more complex. How much each child inherits seems to be a function of the particular family situation as well as of the cultural ideal. Equal division of land, is frequently not effected. Furthermore, in some cases the land remains undivided and is either granted to a common trust (una sucesion) or to the oldest male son once he has received an arbitrio from his father to take care of family affairs. In any case, custom calls for the land to be divided among the surviving member of the family. And it is widely recognized that the division of land among inheritors is the single most significant source of family conflict among minifundist peasants.

Another important means in obtaining a plot of land is to purchase it. The selling of land is usually done by peasants moving to urban places or emigrating to New York; by older peasants unable to work the land or in need of cash; or even by urban settlers willing to guarantee some cash from their land in sight of peasant's illegal occupation of land or the 1972 government's agrarian code. Because of demographic pressure, and the fact that minifundist peasants under normal conditions do not sell their family labored plots, the price of land has increased considerably in the last decade. For instance, in Pontezuela, don Gregorio's mother bought in 1962 35 tareas for RD\$600.00; today he is selling his eight inherited tareas at \$375.00 per tarea. From zone to zone the price of land varies, but in any case the region wide value of land is increasing from \$5.00 to \$8.00 per tarea of land in the 1940's to \$250.00 to \$500.00 today. The price increase of land contributes to the inaccessibility of purchased land to small subsistence peasants.

The government land reform program and the peasant's illegal occupation of privately owned fallow land offers another opportunity of land acquisition. Slash and burn agriculture (hacer tumbas) on state owned land is also practiced in the Central Hills, especially in the parajes of San Jose de las Matas and Janico. This practice continues because the government does not consider its lands illegally occupied as long as the peasant does not reside in the plot after one season or more. If he does, the Army is expected to intervene and force him off the land (desalojo). Another reason that this practice continues is that the quality and erosion of the hill land does not permit stable settlements on it. Even with these alternatives to acquire land and work plots of land, sharecropping remains the most common option open to peasants unable to control sufficient labor land.

Significantly, the control and ownership of a plot (not the mere access to the land) is one of the most inner cultural values of the tobacco peasantry,

if not of all peasants. 115 minifundist parceleros from Pontezuela, Jacagua, Guazumal, Licey al Medio and Jose de las Matas were asked if they would prefer either the ownership of 40 tareas of land, a steady wage earning \$2.50 per day doing agricultural work, or having a steady urban employment doing "anything" (cualquier cosa). The responses were as follows: 77 opted for the first alternative, 9 for the second, 24 for the third; five of the peasants were unable to make up their minds although all of these discounted the second option.

The minimum average extension of a plot desired by peasants to sustain their families and fulfill their cultural aspirations, varies considerably from one zone to another. In all, probably 75 tareas is the average ideal extension of a tobacco plot. 91 minifundists of the peasant's group previously mentioned, estimated that a parcela of 50 tareas is "good" enough for them when harvested with tobacco as the main crop, while 75 tareas was "very good" for them. Meanwhile, 12 of the remaining 24 considered 40 tareas of tobacco "good for the maintenance of the family". Two presidents of export firms, and five officials of the Tobacco Institute and of the Dominican Agrarian Institute estimated 75 to 100 tareas of tobacco will be the minimum landholding required for an "average" (undefined) peasant life.

Harvest Strategies

Minifundist plots are harvested thoroughly. In doing this there are a number of strategies followed by tobacco peasants. They either seed their plots exclusively with tobacco or divide the land by sowing a portion of their tareas with tobacco and plant the remaining land in secondary crops. In the second option, tobacco is either intermixed with the secondary crop or isolated from it. The choice of having a second crop in the plot is the most common: the tobacco plant is contingent upon many natural environmental variables thus making its exclusive harvesting too risky. The other crops not only counter balance the

risk involved in the tobacco harvest, but also supplement a subsistence household economy. Among the most important of these secondary crops are corn, pineapples, rice, tomatoes, yuca, bananas, coffee, cocoa, and coconuts. It goes without saying that amid a market system, minifundist tobacco peasants are not economically self-sufficient. Tobacco production not only provides a source of income, however, but it also reinforces the traditional peasant ideal of obtaining goods for direct consumption from the land.

TABLE 20

MINIFUNDIST LAND USE IN 3,515 PLOTS IN THE CIBAO, 1971

FARM AREA (tareas)	TOBACCO LAND (tareas)	BY ITSELF (tareas)	%	INTER- MIXED (tareas)	%	OTHER CROPS (tareas)
1-32	17,817	12,006	(67.38)	5,811	(32.61)	14,001
32-80	12,973	9,181	(70.77)	3,792	(29.22)	14,606
TOTAL	30,790	21,187	(68.61)	9,603	(31.18)	28,607

Source: data elaborated from Secretariado Tecnico de la Presidencia 1972: group IV, p. 3.

Secondary crops are selected for harvest according to three main criteria: First, their growth cycle, and the time and labor investments in the crop must be considered. During the tobacco harvest it is almost impossible for a family working a tobacco plot to dispense time and labor care to any other crop. Secondly, the supplementary home diet value is important since some of these crops are not market but family oriented. Thirdly, the market price is considered in order to supplement tobacco's cash returns.

Although these tobacco farms consider it their main cash crop, there are other producers for whom tobacco is the secondary crop. A few tareas of criollo tobacco used as a secondary crop are very frequent in Cibao's farms to improve income returns. The tobacco harvest, a temporary crop, has the advantage of providing cash only three months after seed beds are made. This money is secured through middlemen advancements, the selling of barresuelo leaves, or the

harmful economic practice of venta a la flor (early sell). Tobacco is also a good credit crop especially in the country side store houses (pulperias). This money is normally most helpful for household expenses and payments of store house debts between seasons of other permanent or temporary principal crops. Furthermore, tobacco's profits per tarea is among the highest of minifundist crops, and its sole harvest is a secure source of community credit.

During fieldwork in Cutupu and Rio Verde Abajo in La Vega province, the 21 banana conuqueros and parceleros interviewed justified the presence of a few tareas of tobacco in their farms as necessary to solve their lios (debts) in the store houses. For them tobacco represented both instant credit and easy cash. As long as the tobacco price remains above \$20.00/qq. they considered its harvest a good investment. As an informant said: "ei taibako e la coiseicha de nojotro lo infelice. Ella maita lo lio, sobreí too ahora que pagan ei ceiron pei encima de lo veinte peisos..."

Labor Organization in the Plots

While tobacco peasants economically rely upon their plots for subsistence, the key to their production arrangements lies in its low cost of labor. This is especially true since they labor on their own land. Normally the father administers the economic resources of the family and the work is performed by the nuclear family as an economic unit. No cash payment is made to any of the family workers. The object of this family enterprise is subsistence and not individual enrichment or profit maximization. The tobacco minifundist does not value all inputs and outputs in his plot in relation to market prices. Rather he sees himself as a part of a nuclear family household for which he must provide subsistence at all cost.

On some occasions the labor arrangement varies from the above. The nuclear family is used as a labor pool to take care of the harvest while the

father goes out to echar dias (day labor) on a nearby larger farm or sharecrop a plot with the assistance of a few day laborers.. Under these circumstances the father will probably supervise labor in the family plot and work extra hours on it. If the nuclear family is not large enough or the youngsters are not of working age, agricultural laborers on a daily basis are hired.

TABLE 21

PEASANT ECONOMIC DEPENDENCE IN 3,515 TOBACCO FARMS IN THE CIBAO, 1971

FARM AREA (tareas)	TOTAL FARMS	HIS OWN FARM	%	NON-AGRI- CULTURAL ACTIVITIES	%	OTHER FARMS	%	NOT WORKING	%
1-32	2,716	1,960	(72.16)	383	(14.10)	328	(12.09)	45	(1.65)
32-80	799	695	(86.98)	51	(6.38)	47	(5.88)	5	(0.62)
TOTAL	3,515	2,655	(75.83)	434	(12.34)	375	(10.66)	50	(1.42)

Source: data elaborated from Secretariado Técnico de la Presidencia 1972: group IV, p.10b.

TABLE 22

LABOR FORCE EMPLOYED IN 3,515 TOBACCO FARMS IN THE CIBAO REGION, 1971

FARM AREA (tareas)	TOTAL FARMS	ONLY KIN MEMBERS	%	ABOVE ALL KIN MEMBERS	%	WAGE LABORERS	%
1-32	2,716	1,584	(58.32)	816	(30.04)	316	(11.63)
32-80	799	366	(45.80)	253	(31.66)	180	(22.52)
TOTAL	3,515	1,950	(55.47)	1,069	(30.41)	496	(14.11)

Source: data elaborated from Secretariado Técnico de la Presidencia 1972: group IV, p.11a.

Estimates vary but it seems safe to maintain that a family of seven (five men, the male children's ages ranging from 8 to 18 years of age, and two women) can labor from ten to fifteen tareas of criollo tobacco. Family labor is not compensated by wages regardless of how time consuming it becomes. Agricultural laborers are employed either because available family labor is scarce or during transplanting and harvest time when labor requirements increase. Day laborers

receive average payments of \$1.50 per day plus breakfast and lunch (\$1.00). But day labor wages vary from zone to zone. For instance, in San Jose de las Matas and Janico actual payment goes down to \$1.00 per day plus the food, while in Villa Gonzalez and El Ingenio daily wages are \$2.50 plus breakfast and lunch. In some instances, agricultural labor takes the form of an etagio: a price is estimated for a specific job regardless of time requirements. In this fashion the owner of the plot compels the employee to do the work in a restricted time period instead of stretching it out with the hope of augmenting his daily pay. Usually etagios are arranged with one laborer who is then responsible to employ any extra help he requires and pay day laborers from the etagio money.

In addition to the labor of the nuclear family and the payment of day laborers, there are two other sources of labor available to tobacco minifundist peasants. The first one springs out of the peasant's 'inner-adaptational network' and results in a labor pool integrated by immediate kin, in-laws, and compadres. The second source of labor is commonly referred to as juntas.

The inner-adaptational network is a closely knit and well structured social network through which the individual peasant secures control over his environment and multiplies his adaptational resources and thus his chances of success. While in the case of other operating units to be analyzed later on this is not true, in the case of the minifundist peasants their social networks seem to be limited virtually exclusively to this inner-adaptational network. The members of this intensive and effective group integrate a wider adaptational network in the peasant's own environment beyond the labor services they provide.

The members of the inner-adaptational network are normally distinguished by peasants by referring to their kin members --above all brother and father's brother's sons-- as mi familia which a restricted generational implication contrasting to his own nuclear family. In addition to his own family, his in-laws --above all sister's husband-- are referred to as parientes and are considered to be the

closest persons to the family itself. Finally, the dyadic relationship of *compadres* (godfathers) established mainly through baptism may either be symmetrical or asymmetrical depending on the status of both members. The asymmetrical constitution of compadrazgo or fictive ties are characterized as a patron-client relationship. In the case under study, a labor pool integrated by the inner-adaptational network of the minifundist peasant, the symmetrical *compadre* is more likely to cooperate in tobacco harvest labors. In some cases, the peasant might also consider as a member of this inner-adaptational network an amigo (a friend), in contrast to a conocido (a known person upon a superficial and sporadic basis). Friends are normally those non-kin persons who were born in the peasant's own community, or whose presence has been taken into consideration through a person to person relationship from way back in time. For this reason they are normally also considered members of the inner-adaptational network. In fact, most friends are frequently selected to be symmetrical godfathers.

Members of a peasant's inner-adaptational network are expected to freely and spontaneously cooperate among themselves under an ideal pattern of generalized reciprocity. Within this circle of the peasant's adaptational network a flow of favors and services strengthens the unit; these might range from the granting of their labor, or their advice, to financial and community support when needed. Most of these favor exchanges will not be obtained if it were not through this adaptational mechanism. In fact, this flow of services integrates not only a defensive mechanism but it also grants a sense of security in the peasant himself since he knows that when he might require any service from the members of his inner-adaptational network it will be granted to him. This cooperation within the network is reinforced both by environmental pressures as well as by regional tradition. The inner-adaptational network becomes more significant and demanding with geographical proximity.

The consequence of this mutual dependence for services and favors within

the inner-adaptational network is an attitude of both confidence and respect growing out of their highly personal relations. This confidence is in both the assistance they will receive from other members when needed, as well as in the other person himself; the respect embodied in the social relations existing in the network, formalizes their exchanges and preserves the authority of the members.

Paradoxically, relations in the inner-adaptational group do not call for a union of economic interests; i.e., common ownership of plots, crops, or other forms of capital. It is commonly agreed upon that one's first responsibilities are to his own family ("la familia es la sangre y la sangre pesa mas que el agua"). This individualistic pattern seems to prevail under normal daily conditions. Thus, every peasant knows that he is supported and protected by the members of his inner-adaptational network; but daily responsibilities rely upon him and he is expected to handle them with the cooperation of his nuclear family without constant appeal to his adaptational network.

The second source of labor assistance are the "juntas". Peasants attempt to use nuclear family labor on their lands whenever possible. But sometimes in tasks which require labor beyond the capacity of both his nuclear family and his inner-adaptational network labor pools, they attempt to obtain labor primarily through "juntas": a cooperative labor balanced exchange system. Historically the system was associated with a scarcity of labor related to a sparse population, but today it seems to be a product of the inability of some peasants to lay out cash for wage labor. The "juntas" are not paid in cash; a certain amount of labor on one man's field is exchanged for a given equivalent amount of labor on another junta member's field. The worker's food is provided by the owner of the field.

This junta practice seems to be rapidly decreasing under the more profitable practice of wage labor employment. For instance, during the time of field-work only six tobacco juntas were reported altogether in the towns of Gurabo, El Ingenio and Villa Gonzalez. Nevertheless, with the appearance of peasant's

"asociaciones" (associations) and cooperative, and the Tobacco Institute advancement of community labored seed beds, labor juntas arrangements are present but only in an analogous form. Instead of members laboring in other plots or even in the seed beds, they usually pay a day laborer to do the labor he was expected to have contributed.

Minifundist peasants have to compete with day laborers to employ themselves as agricultural workers or to harvest a plot under the sharecropping arrangement. The day laborers are a group of landless workers forced to sustain themselves and their families through wage laboring on a daily base. They approximate Mintz's description of a "rural proletarian" (1953-1954). They make a living by selling their labor and live in callejones (rural roads connecting different plots). Their houses are normally owned by a nearby landowner, although in some cases it might be theirs. Frequently each callejon has seven or eight houses together each one occupying less than one tarea of land. In every "callejon" a family of three or four brothers, their in-laws, and perhaps one or two friends establish residence. Survey data from 35 day laborers from Pontezuela, El Rubio, and Rio Piedras Abajo indicates that their two main aspirations are: to own a plot of land and/or to have a permanent employment in an urban settlement.

Technology

Minifundist peasants make scarce utilization of technological means to produce tobacco in their plots. Nineteenth century practices are intermixed with fertilizer and pesticide use. Efforts from the agronomists of the Tobacco Institute and from private export houses are gradually improving conditions. These are directed toward seed beds construction and care, the use of pesticides and fertilizers and care of leaves with respect to humidity. The crop yield increases and thus the increased profits which these practices represent are stimulating the abandonment of both malpractices (like drying the tobacco leaves outside the tobacco

shading houses and under the sun) and superstitious customs. An example of the latter was the presence of a crucifix at each end of the plot to force insects and plagues from the soil. As a peasant from Tamboril said: "If with fertilizer the plant's yield increases, I will make it drink that rum".

TABLE 23

TECHNOLOGICAL PRACTICES IN 3,515 TOBACCO FARMS IN THE CIBAO, 1971

FARM AREA (tareas)	TOTAL FARMS	MECHANIC FORCE	%	ANIMAL FORCE	%	BOTH	%	NONE	%
1-32	2,716	456	(16.78)	1,177	(43.33)	270	(9.94)	813	(29.93)
32-80	799	228	(28.53)	302	(37.79)	141	(17.46)	128	(16.02)
TOTAL	3,515	684	(19.45)	1,479	(42.07)	411	(11.69)	941	(26.77)

Source: data elaborated from Secretariado Técnico de la Presidencia 1972: group IV, p.12.

A Minifundist Annual Income: An Estimate

One of the most arduous problems during field work was to estimate the present day income of a minifundist peasant. While it is difficult to obtain adequate aggregate statistics on the amounts of different crops produced, the output and revenue of one such parcela unit may serve as an illustration.

Don Pedro G. lives in the municipio of Moca with a nuclear family of seven; five of these are twelve years or older and none is married yet. His parcela comprises 40 tareas and it is valued at RD\$14,450.00; of this amount, \$450.00 represents the value of the house and \$14,000.00 the surrounding land. The farm is in debt with the Agriculture Bank and interest payments may run between \$50.00 and \$150.00 per tobacco season. The parcela produced in 23 tareas 49 qq. of criollo tobacco which he sold to a compadre middleman for \$28.00/qq.; in ten tareas he harvested 24 thousand bananas (two thousand monthly) and later sold them for \$14.00 per thousand; and some other minor crops like yuca and batatas. If labor costs are not considered, profits on the sale of the tobacco comes to \$843.00, on the sale of the bananas approximately \$226.00 and from the minor

crops an estimated \$150.00. Don Pedro's parcela cash income is then roughly \$1,019.00 a year once interest payments are paid.

During the month of August, don Pedro spent in the nearby store house \$64.63. This bill includes such items as rice, beans, spaghetti, salt, cheese, oil, bread, sugar, and onions; but excluded meat, chicken and eggs, for which record was not able to be kept from a nearby country meat shop. If this monthly bill is representative of the year around food expenses at the pulperia, then \$775.56 for a household of eight persons per year can be estimated. This leaves roughly \$243.44 --\$20.28 per month-- to take care of all other needs of the nuclear family throughout the year.

Obviously, if don Pedro's income is representative of other small tobacco producers, it shows that the cash resources of minifundist peasants are very scarce. Occasional illness, or even expenditures on rum, cock fights and lottery tickets will reduce them even more. Harvest income drains itself into the repayment of seasonal debts acquired with the pulperia and other commercial units of his environment. With their present day control and access to land, tobacco peasants can only hope to maintain a subsistence economy. Meanwhile, entrepreneurship is realistically out of their reach and they become contingent upon any unit in control of financial resources. On the other hand, there is no surplus from which to buy products of handicraft or of domestic industries; ironically, the growth of the latter is contingent upon an expanding internal market mainly represented by these peasants who are the great majority of the rural population.

Financial Resources: Cash and Production Credits

A critical aspect of tobacco peasant operations is their lack of capital resources, and thus their limited access to credit. Amid a market system, it is not enough for peasants to control some tareas of land. They also need to have access to a second core energy resource: production credit and financial

capital. In other words, the ownership of land, although a cultural value, is not a self-sufficient source of power for minifundist peasants.

To offer a most evident example of their contingency upon production credits and financial resources, two market strategies might be considered. Criollo market prices normally start for "barresuelo" leaves at \$10.00 to \$14.00/qq in late January and early February. As the season advances until the end of August, market prices rise sometimes as high as \$28.00 and \$30.00/qq. At the very end of the season they decline once more to an average \$24.00/qq. Custom calls for tobacco sales to take place once it has been bulked by the producer in his tobacco shading house ("rancho") and before it is hampered. The transactions are expected to be negotiated according to the public market prices at that time. In view of this, the peasant's strategy calls for holding the tobacco crop to sell at higher prices before the end of the season.

In many cases, minifundist peasants find themselves in hard need of cash. They might be either pressured by a small store owner to pay their seasonal debts, or by the sickness of a kin member, or by similar other circumstances. In this situation the peasant has to sell his crop earlier in the season at lower prices than would be obtained from a sale at a later date. Another practice known as "venta a la flor" (flower or early sale) may take place. By this the peasant sells two or three quintals of his tobacco while the plant is still in the field. The price is set by the current market price. The middlemen pay him and will receive the tobacco later when it is harvested and cured by the peasant. Thus, if the producer sells two quintals of tobacco at \$10.00/qq early in February, by the time he delivers the tobacco to the middlemen the market price will probably range from \$24.00 to \$28.00/qq. This early sale represented a minimum net loss of \$28.00 to the peasant. And the middlemen profited by a 130% interest on the money advanced for less than five months.

As previously said, available field data indicates that production

credit is the single greatest need of minifundist peasants in addition to greater land control. Our data also supports the assumption that the distribution of accumulated financial resources is considerably more unequal than the mere distribution of land resources and income. Furthermore, fixed and operating capital, in addition to land, is practically entirely in the hands of other units which exclude the minifundist peasants. The most common sources of cash and production credits to peasants in their urban environment are: (i) various forms of loans and financial credits; (ii) and the popular community "san" which will not be considered here because of its urban character and irregular employment among peasants to afford harvest and household expenses.

Inner-Adaptational Network Loans:

The most informal credit practice among minifundist peasants is the interest free financial help coming from a member of his inner-adaptational network. In financial pools, older brothers and asymmetrical compadres are normally expected to cooperate promptly. While relations with a brother or a peasant's relatives are more open and egalitarian, exchanges with asymmetrical compadres are usually of the patron-client nature. It is not unusual to hear, when in private, prominent figures in the rural communities complaining that they are looked upon as compadres (asymmetrical in this case). This is because the flow of services and favors attached to that fictive kin relationship is also asymmetrical.

Undoubtedly, not only does the peasant receive gratification from these asymmetrical compadre relationships (either in cash, loans, employment and labor recommendations, protection from community law enforcement and the like) but the compadre also grants favors. The latter maintains the needed peasant as his client for whatever reason he might desire, and normally the peasant represents a guarantee to his compadre's social, political, and economic community status. For instance, 19 of 25 sharecroppers interviewed in Villa

Gonzalez and Pontezuela who could benefit from the newly passed agricultural law #289, maintained that they will not occupy nor buy the land from their landed elite compadres even when legally possible. Their common argument being "how could I do that to my godfather who has taken care of me for so many years now...?"; "after all". one of them reasoned, "hasn't Mr. D. given me the food for my children all these years?" Two of the remaining six doubted on how to proceed while only four sharecroppers were planning to buy the land as provided by the law. It is only fair to observe that the sacredness of the asymmetrical compadre ties does not seem to hold for the children of the interviewed sharecroppers --probably because of the emergence of new adaptational alternatives-- especially when it is at the expense of adaptational advantages.

Non-Commercial Credit: Store House "Trueques" and Food Credits:

A form equivalent to cash acquisition among tobacco minifundists is the "trueque" (exchange) of the kind with a store house owner. Through this strategy, the peasant exchanges some tobacco strings (sartas) for food, rum, or any other desired good. The sarta's price is usually lower than market price. This provides a profit to the "pulpero" who frequently resells the tobacco when market price increases thereby obtaining a further profit margin. In still other cases, the peasant is paid according to the market price but the sartas are weighed in the pulperia's balance --which uses an American scale by which one pound = 16 ounces-- while the peasant weighs his tobacco as any other unit operating in the tobacco business in a French scale --in which one pound = 18 ounces. Thus, the 'sarta' show an artificial weight decrease when sold to the pulpero which works to the merchant's advantage since middlemen will buy the tobacco from him using a French scale. The "trueque" practice has encouraged peasants to take 'sartas' from nearby tobacco curing houses at night hours. This has forced middle and big tobacco producers to employ night watchmen in their tobacco 'ranchos (shading houses).

TABLE 24

ALTERNATIVE RESOURCES EMPLOYED BY 230 CIBAO TOBACCO MINIFUNDISTS DURING THE 1971-1972 SEASON

FARM AREA (tareas)	TOTAL # OF GROWERS	INNER ADAPTA- TIONAL NETWORK LOANS	%	STORE HOUSE NON-COMMER- CIAL CREDIT	%	USURERS	%	PRODUCERS ORGANIZA- TIONS	%	BANK PRODUC- TION CREDITS	%	MIDDLE- MEN	%	OTHER
1-32	115	91	(79.13)	104	(90.43)	18	(15.65)	27	(15.65)	10	(8.69)	103	(89.56)	18 (15.65)
32-80	115	88	(76.52)	106	(92.17)	15	(13.04)	49	(13.04)	39	(33.91)	98	(85.21)	26 (22.61)
TOTAL	230	179	(77.82)	210	(91.30)	33	(14.34)	76	(14.34)	49	(21.30)	201	(87.39)	44 (19.13)

(Note: These minifundist producers were verbally asked to identify the financial alternatives actually employed by them during the tobacco season regardless of the amount received and the number of times they resorted to the same source. Every alternative was separately recorded. The figures in the table represent the number of peasants which resorted to the various sources of finance. Although some middlemen are also members of the peasant's inner-adaptational network, they were distinguished according to the role for which the money was granted. The figures in parenthesis refer to percents of peasants in each category).

Peasant's geographical origin is: Guazumal (22), Jacagua (25), Gurabo (33), Pontezuela (44), Cutupu (16), San Jose de las Matas (35), Licey al Medio (12), Tamboril (12), and Moca (26).

Peasants normally find a source of credit for household food consumption in the store houses near their plots. Peasant-store owner relations are complex since each must pursue an interest hostile to the other. The store owner must often extend credit to a peasant merely to tide him over until harvest time. If he stops credit, the peasant will simply switch his patronage to another pulperia and the entire amount he owed might be irrevocably lost. On the other hand, the peasant debtor knows that if he does not pay a little on account from time to time, he can no longer buy there, and his bad reputation will spread to nearby stores. In this fashion, minifundist peasants and store owners maintain a season long relationship intermixed with credits and small reimbursements. For instance, available information for a pulperia in La Vereda, Rio Verde (La Vega), indicates that it had at the moment of fieldwork the sum of RD\$1,051.38 in the customer's debit side, meanwhile, its total fixed and operating capital was RD\$3,411.65.

Frequently peasant seasonal debts are repaid to the store owner with tobacco instead of cash money. At the moment of harvest pulperos receive tobacco from the peasant debtors to repay their individual debts (lios). For this reason, and because of previously mentioned "trueque" practices, store owners normally work as "comines" (second middlemen) to tobacco middlemen. They either receive half the middlemen's commission (\$1.00/qq.) or instead of a division of the purchasing commission they realize the profit margin growing out of the price differences between the one paid to the peasant and the one obtained from the middlemen when transferring the tobacco to him.

The study of commercial practices of 20 store houses randomly selected from rural communities in Gurabo, San Jose de las Matas, Jacagua, Tamboril, Moca, and Cutupu, showed that 18 of them practiced the "trueque" exchange, and all of them accepted tobacco for the repayment of seasonal debts. Evidence

is also available that at least 14 of these store houses served as comines (second middlemen) to middlemen.

Prestamistas (usurers):

One of the most unfavorable options available to minifundist peasants in order to obtain cash is the appeal to a usurer or prestamista. Their money is normally loaned with a 15 to 20% monthly interest rate; as an informant jokingly said, al modico 20. In some cases, local usurers depend upon city loan houses thus operating as middlemen themselves, but in other instances, they just borrow money from them at a 3% monthly rate. Most frequently usurers start lending some cash which comes from the selling of inherited land, or from the operations of some commercial enterprise. With the passing of the years they consolidate and expand their clientele and capital.

The operations of two of these usurers studied in the town of Villa Gonzalez, and of another one from San Jose de las Matas, showed each prestamista --two of them being women-- having lower middlemen usurers working for them thus establishing a more complex network between them and the peasants and share-croppers clientele in the community. Another case from Gurabo, indicated a middle food store owner lending money on a weekly basis.

There is sufficient evidence to maintain that in the last decade, at least some middle and big landowners have also started lending money to minifundist peasants, although with lower monthly interest than those of the traditional usurers (5 to 10%). Since they are in possession of better financial resources than minifundist producers, they augment the range of their rural environmental control through this strategy. In one of the reported cases, a landowner of 210 tareas in the proximities of Moca is said to have sold 120 tareas of his farm in order to procure sufficient liquid capital to get him into the lending business as a more secure source of profits than agriculture. Regardless of whether these cases are representative or not, the fact seems

to be that in the absence of financial credits minifundist peasants are vulnerable not only to the high rates of interest of traditional usurers but also to the financial control of middle and big land owners.

peasant Organizations:

During the last years peasants have organized either by themselves or with outside help a number of tobacco growers associations (asociaciones), and they have created a number of savings and loans cooperatives. The main purpose of these organizations is to enable and improve peasant's production, financial and marketing potentialities through structural arrangements of cooperation and planning. Some of the tobacco associations, in contrast to the cooperatives, are more informal in nature and locally oriented. In fact, they show characteristics of spontaneous origin and organization. Their composition, as is probably also true of local cooperatives, is integrated by members of the peasant's inner-adaptational network.

From a total of 11 peasant local organizations visited and studied, the composition of two of these tobacco associations in La Vega province was analyzed in more detail. The first had 17 members, the other 24. Both had started operations by local initiative in 1969 and 1970. Presently, in 1972, they were receiving some limited advice from the community services of the privately owned Santa Maria Radio in the Santo Cerro, and from agronomists from the Tobacco Institute, in matters ranging from credit record keeping to construction of tobacco seed beds. Their minimum objectives were to cooperate in labors of tobacco crop; provide some limited credit assistance to members by enforcing some saving practices; and to market their own tobacco (and other crops) without the interference of middlemen. At the moment of the fieldwork the first goal was being accomplished. The other two, lacking the necessary capital assets and thus financial resources, were not being realized.

Member composition of the two associations seemed representative of other peasant local organizations because of the formal integration they accomplished

with the peasant's inner-adaptational network. For instance, the composition of the first association studied was, taking the informant as ego: four brothers of ego, his father, two brothers-in-law, and three symmetrical and one asymmetrical compadres of ego. The remaining five members were neighbors of ego and all but one were related through compadre and relative ties with some of ego's brothers.

These small peasant's organizations, although still small both in scale and in number, seem to have a fair chance of breaking present day financial control of prestamistas, middlemen, and other units over them. If these minifundist peasants accomplish the mastering of formal group association techniques; if they are able to over-run the influence of local economic and political bosses; finally, if non-peasant concerns, like those of political nature from the national government and of the army, do not block the operations of these groups; then, these socio-economic organizations will widen individual peasants' social range of operations and their available credit resources, thus improving the financial standing of peasant members.

Furthermore, if they accomplish the local marketing (from the peasant group to the tobacco criollo warehouse) of the member's harvested tobacco, they will probably obtain better prices by increasing their bargaining power through the volume of the harvest. The control of the marketing operations by these organizations, instead of present day middlemen, will further increase their profits with the possible transfer of the latter's purchasing commission to the producer organizations.

Were this to happen, export houses could then institute a new purchasing policy. Instead of depending upon middlemen to guarantee them the necessary supply of criollo tobacco, exporters could transact directly with the producer organizations. This could be done through a contract stipulating first that previously advanced money delivered to producers by means of middlemen, will

now be granted to the producer organizations. In return, they might agree to sell their tobacco to the patronizing export house fixing prices according to market conditions after the harvest is ended. This procedure would not only rationalize purchasing operations, but it probably would eliminate middlemen marketing practices at least in some tobacco zones; contribute to the organization or producing sector, and also guarantee exporters their share of harvested tobacco in advance.

In any case, the Tobacco Institute has called upon the Agriculture Bank (Bagricola) to grant tobacco production credits to small grower's associations starting with the 1972-1973 season. This will break an old policy by means of which production credits were not extended to non-legally recognized peasant organizations. This financial support, if effective, will increase association members capacity in obtaining credit from their own organization and thus accomplishing one of their most urgent functional needs. On the other hand, this practice will augment the range of credit services from official organizations to minifundist peasants which today seem almost non-existent.

Bank Production Credits:

The most formal source of production credit available to tobacco minifundist producers is that of the Agricultural Bank and of the Agriculture Department; both credits are channeled through the official Tobacco Institute with an annual interest rate of 8% normally, it becomes 10% once administrative expenses are included. These credits cover all production costs as presented in tables 15 and 20; under special contracts the construction of tobacco curing houses. Besides they provide for technical assistance guaranteed by the agronomists of the Tobacco Institute.

The credit program of the Agriculture Department known as supervised credit, favors those peasants who in previous seasons have failed to comply with credit reimbursement requirements of the Agriculture Bank. When this happens

and the peasant applies for a new credit his case is sent to the Agriculture Department where his petition is studied by officials of both the Department and the Tobacco Institute.

Another source of official credit available to the peasant is that of the Community Development Office (O.D.C.). Their credits are channeled in coordination with the Tobacco Institute, but the range of these credits is normally wider since it embraces community programs as well. According to some informants, this source of credit is the one most politically oriented among the three official organizations providing production credit to peasants.

The process of obtaining a loan from the Agriculture Bank is complex and time consuming. The Bank requires a number of documents, the most significant of all being the land ownership certificate, and a contract of technical assistance between the peasant and the Tobacco Institute. The former requirement automatically excludes all sharecroppers and many small peasants without proper land documents, from credit eligibility. But because the land is the creditor's best guarantee, this requirement is not overlooked; even when there is no sign on the part of the Bank or any other official organization of being interested in expropriating small plots. Other requirements embrace the signature of the local mayor (alcalde pedaneo) if the land occupied by the peasant is owned by the State. A two years' lease is required if the land is rented; but if the loan is for the construction of a tobacco curing house then the lease must be for a minimum of four years. Peasants older than 60 years of age have to accompany their signature with that of a close kin member who will guarantee the credit in case of illness or death of the elder man. In addition to these documents and requirements, the Bank demands that the peasant be free of debts, and that he has never evaded or failed to reimburse previous credits.

Once the peasant has complied with these necessary requirements he becomes involved in a highly bureaucratic procedure which starts by visiting the Tobacco

Institute and the Agriculture Bank, or any of their local branches. From the signing of the credit application form to the first disbursement, an average of 35 to 45 days elapse. In contrast to the procedure to obtain an Agricultural Bank credit, the Agricultural Department supervised credit requires only from 20 to 25 days for its approbation. The Secretary requires that the peasant be the owner of the land and be able to reimburse the credit. In order to determine his solvency an official of the credit department of the Secretary will visit his plot and estimate his land and other equipment values.

All official credits are based on the Tobacco Institute production cost estimates per tarea. But for each specific peasant these estimates are re-elaborated between the peasant and the Agricultural Bank credit experts. The Bank's experts normally try to reduce the approved credit release below the amount corresponding to the Tobacco Institute's estimates. According to various Institute officials their estimates try to provide a margin between the harvest expenses per tarea of tobacco and the approved credit disbursement for any occasional need the peasant might have during the season. The rationale behind this is that if this money is not guaranteed to the peasant for household expenses he will have to go to a middleman or to a usurer to secure his money. In either case, the reimbursement of the production credit to the financial source will be endangered and the economic independence of the peasant handicapped.

In order to control credit expenditures, money disbursements are made according to specific labors as the season advances. Each disbursement has to be signed both by the peasant and the regional agronomist of the Tobacco Institute. The latter checks into the money employment and the specific financial needs of the peasant's crop at each time of the harvest; if necessary, he can lower the actual disbursements below the amount approved by the Agricultural Bank credit expert. The requirement of his signature and his authority to determine the final figure of each credit disbursement has occasioned some abuses

and pressures on the part of the agronomists according to some peasant informants.

The most difficult task in relation to bank production credits is the procurement of its reimbursement. Formerly this task was taken care of by the Agriculture Bank itself; but presently it has been transferred to the Tobacco Institute which in this way monopolizes credit operations furthermore. Most of the small peasants are economically insolvent and they prefer to pay debts to a nearby store owner or to a middleman for instance, before taking care of their more formal debts from outside their own communities. For this reason, according to some officials of the Tobacco Institute, even when the approved credit for the 1971-1972 tobacco season was RD\$2,571,482.07, only RD\$1,551,988.02 was actually spent. According to the informants, this was the only way they could control its employment and final reimbursement. Presently, the Institute is claiming an almost 100% credit reimbursement; in previous years it seems that the Agricultural Bank by itself could never get repayments for more than 60 to 70% of the money.

The 1971-1972 official production credit financed, according to unpublished information from the Tobacco Institute, only 9.4% of the estimated 25,000 tobacco growers of all varieties. In tobacco surface this amounted to 28.5% of the 336,000 tareas under harvest. There are no estimates available to know how much of this finance went to minifundist, to middle or to big landowners. However, the fact that the 9.4% of the financed landowners had 28.5% of the tobacco land suggests that a high proportion of these tobacco growers are not minifundist but middle and big landowners.

The Tobacco Institute credit proposals (cf. Intabaco 1972 b:7, and 48-49) for the 1972-1973 tobacco season calls for a total disbursement of RD\$3,450,000. Of this amount the Agricultural Bank is expected to contribute RD\$3,000,000; the Agriculture Department with its program of supervised credit with RD\$250,000; and the Community Development Office would add RD\$200,000.

The criollo tobacco harvest would receive RD\$1,600,000 of the appropriated money; Cuban tobacco RD\$450,000; and olor tobacco RD\$900,000. Meanwhile for tobacco curing house and mechanical equipment RD\$500,000 would be employed.

Interestingly enough, the approximate actual disbursement for this tobacco season has been once again lower than predicted by the official Tobacco Institute. Until January 31, 1973 when official financing operations normally end 340,549 tareas of tobacco have been financed with RD\$4,326,382. To this amount the Agricultural Bank actually contributed only RD\$1,945,852.35; the Agriculture Department only RD\$156,062; and the Community Development Office RD\$198,076. The remaining credit came from the private Dominican Development Foundation --RD\$40,468.48-- and not surprisingly from private export houses: RD\$2,184,000 (cf. El Sol newspaper, Thursday, February 15, 1973; second section, p.1). Official credit output increased in respect to the previous tobacco season RD\$748,632.33, although being RD\$1,149,379.65 short from the proposed goal.

Peasants are still unaccustomed to and unsure of the benefits resulting from the employment of bank credits. A number of complaints and prejudices are frequently formulated against the official credit program. Some of these are: (i) the complex and impersonal bureaucratic procedures to be followed to guarantee the credit. (ii) The normal delays of money disbursements. (iii) Credit restrictions in money employment, especially for non-harvest uses. And (iv) fearfulness of not being able to pay the credit interest. As a matter of fact, minifundist peasants seemed most reluctant to use bank credit facilities primarily because of fear of losing their plots which is the only asset guarantee they have to cover the credit.

Although a minority of minifundist peasants who are taking advantage of the official production credits seem to be pleased with this alternative, 44 of 49 "conqueros" and "parceleros" of criollo tobacco from Burende, Gurabo, Pontezuela

Jacagua and Licey al Medio, when asked whether they will apply for their bank or supervised credit during the 1972-1973 season, answered affirmatively. Their main reason being that with the production credit they are able to evade the middlemen pressures thus selling their crop under the most favorable market conditions; besides, it helped to organize their economies. When asked whether or not they took some money from another source, 41 acknowledged they had done so, and 34 frankly admitted receiving the money from a middleman. Their explanation being that they needed the cash for household needs, including medicines and food and other pressing debts.

Export Houses Money... Middlemen Advancements:

Undoubtedly, the most common and customary cash loans available to the criollo tobacco minifundist during the tobacco season is that coming from the private export houses through their warehouse middlemen. The operations and importance of the middlemen will be considered when analyzing the second level of articulation of the tobacco industry. At this point it suffices to mention that middlemen's "dinero regado" (distributed money) has a number of advantages over any production credit in the eyes of the peasant.

Some of the advantages are: first, that this money is provided for whatever purposes the peasant might consider convenient; it is not a production credit in a strict sense, but a money loan. Second, the money does not have to be reimbursed in cash nor does the peasant have to pay any interest for its use. Third, the money is home delivered and granted on a personal basis. Fourth, the middleman grants the money at the moment of request without weeks of delay and bureaucratic interference. Fifth, the only condition attached to the money is that the peasant will have to repay the advanced cash by offering the middleman preference over competing buyers to purchase his crop at public market prices when the transaction might take place.

Relations between peasants and middlemen are very complex in nature and structure since each one knows he is pursuing an interest which might become hostile to the other. First of all, they normally know each other on a personal basis. Minifundist peasants, if presented the alternative, will not sell tobacco to a strange middleman (personas or cualquiera); but to a member of, or at most to one related to, his inner-adaptational network. On the other hand, the middleman prefers to advance money and depends on for his clientele, peasants he knows as a result of a person to person relationship. But, secondly, they both are well aware that the other might try to take advantage of him thus converting a balance of reciprocity exchange into an unbalanced one. Significantly enough, during the actual tobacco transaction the inner-adaptational network ties, if existing between the buyer and the seller, do not prevent tension and the pursuit of individual interest at the expense of the other. Thus, this situation is analogous to the division of inherited land among kinsmen.

For instance, the peasant knows that the middleman might try to be unfair in matters of price and/or weight. In the former strategem the middleman is able to take advantage of the peasant's ignorance of the warehouse fixed purchasing price and its fluctuations. In the latter, by weighing the tobacco at the time of the sale in a fixed balance.

On the other hand, the middleman has to keep vigilance on the moisture of the hampered tobacco, and the content of the hampers themselves; in some cases stones and dust will be included in them to augment the tobacco weight. In other cases, the minifundist peasant, especially if he is only a conocido (a social category standing between a friend and a stranger) or a "persona" (a stranger) to the middleman--might try to evade reimbursement of the advanced money (cruzarse) by not selling his crop to him. If this were to happen, the middleman will probably lose the advanced money and for sure the expected purchase commission. Besides, he will have to reimburse the advanced money

to the export house warehouse from his own profits.

Regardless of actual tension and even conflicts growing out of these practices, middleman and peasant are contingent upon each other under present day marketing arrangements. The small producer needs the advanced money and has to sell his tobacco to the warehouse. On the other hand, the middleman depends upon the peasant to obtain a clientele which will justify his commercial enterprise in front of the warehouse. Also, since his profits are formally conditioned by a purchase commission, he has to increase his clientele in order to augment the final volume of purchased tobacco.

Up to the present time, minifundist peasants have not organized themselves significantly as to minimize the middleman's role. On the other hand, because of the high number of independent small tobacco producers, warehouses cannot deal with them directly and thus discourage peasants' presence on their premises. This they do by neither offering to advance the peasants money directly nor granting the middleman's purchasing commission to them if they sell their tobacco to the warehouse directly. Besides this policy, peasants themselves rarely like appearing in front of an export firm warehouse. Among other reasons, they do not want to risk the rejection of their tobacco at the inspection gate of the warehouse, nor can they afford the transportation costs from the plot to the warehouse, or to lose income returns because of the normal tobacco weight shrinkage (merma) resulting from the time elapse between the moment the tobacco is purchased by the middleman and when it is weighed and received by the warehouse. These risks the peasant will leave for the middleman to take, thus conforming himself with the sale of his crop in his own tobacco shading house.

Other Independent Production Units

Besides conuqueros and parceleros peasants there are three other

independent operating units in the production level of the tobacco industry. They are: middle owner peasants, latifundists, and a newly arising agricultural tobacco entrepreneur. In an over all generalization, the most significant difference between their adaptational network and that of minifundist peasants are: (i) the size and the agricultural exploitation of their farms; (ii) the labor social organization in their farms; (iii) and their sources of production credit and financial assistance.

Landholdings:

According to table 23, the number of enumerated tobacco farms with more than 80 tareas is only 653 (15.66%) of 4,168 farms, but they control 80% of the tobacco surface. The average size of a latifundist farm is 2,336 tareas in sharp contrast to a conuco averaging 14 tareas and a parcela with 49 tareas. However, the agricultural exploitation of their estates is not as intensive as that of minifundist plots. While the middle and entrepreneur group comprises 131,416 tareas of land, only 37,162 (28.27%) are presently harvested: 15,850 tareas with tobacco (67.44% by itself, and 32.55% intermixed with other crops), while 21,312 tareas are harvested with secondary crops. On the other hand, the landed elite has 177,520 tareas of land with only 32,834 (18.49%) tareas under harvest: 5,625 tareas with tobacco (96.03% by itself and 3.96% intermixed with secondary crops), and 27,209 tareas of tobacco (cf. Secretariado Tecnico de la Presidencia 1972: group IV).

Not surprisingly, the conucos with only 10% of the land in the census, produce 34% of the tobacco harvest, while parcelas with another 10% of the area add 25% to the national tobacco production. In all, minifundist tobacco production accounts for 59% of the national harvest, compared with 11% from latifundios, and 30% from middle owner peasants and tobacco entrepreneurs. This intensity of land use is, in fact, so much greater on the small plots that it outweighs all their disadvantages in terms of poorer soils and lack of

technical and financial resources.

The low level of agricultural exploitation and of productivity, specifically in the landed elite's estates, is usually explained in the association with three variables. Although some of these are highly questionable, they are: (i) technological means of production (cf. table 25) which do not significantly vary from the one employed by minifundist producers (cf. table 23). (ii) Harvester income contingency upon land yieldings which is not so high among large landholders as in the case of minifundist peasants (cf. tables 21 and 26). (iii) The presence of pasture land in big estates with its characteristic eco-system of extensive land use: the minimum yearly average ratio between criollo, cattle and pasture land is 10-20 tareas for every cow. Frequently the cattle are rotated from one potrero (pasture land portions) to another as the pangola (cattle grass) grows. A rough estimate indicates 150-250 cattle heads in the big estates.

TABLE 25

TECHNOLOGICAL PRACTICES IN 653 TOBACCO FARMS IN THE CIBAO, 1971

FARM AREA (tareas)	TOTAL FARMS	MECHANIC FORCE	%	ANIMAL FORCE	%	BOTH	%	NONE	%
80-800	577	122	(21.14)	198	(34.31)	126	(21.83)	131	(22.70)
800 and more	76	18	(23.68)	23	(30.26)	23	(30.26)	12	(15.78)
TOTAL	653	140	(21.43)	221	(33.84)	149	(22.81)	143	(21.89)

Source: data elaborated from Secretariado Tecnico de la Presidencia
1972: group IV, p. 12a.

TABLE 26

ECONOMIC DEPENDENCE OF 653 TOBACCO FARMERS IN THE CIBAO REGION, 1971

FARM AREA (tareas)	TOTAL FARMS	HIS OWN FARM	%	NON-AGRICUL- TURAL ACTIVITY	%	OTHER FARMS	%	NOT WORKING	%
80-800	577	460	(79.72)	11	(1.90)	79	(13.69)	27	(4.67)
800 and more	76	44	(57.89)	1	(1.31)	24	(31.57)	7	(9.21)
TOTAL	653	504	(77.18)	12	(1.83)	103	(15.77)	34	(5.20)

Source: data elaborated from Secretariado Tecnico de la Presidencia
1972: group IV, p. 10a.

Whatever the explanatory value of these variables, low agricultural yieldings and low levels of land exploitation also seem to be connected with big land owners attitudes towards agricultural operations. For them agriculture is often a sideline; as a matter of fact, to a large number of big estate owners there seem to be few economic incentives to improve traditional land uses and farm management methods. Traditional economic incentives--i.e., prices and credit--just do not work. Their impact also seems to be minimal since other factors governing farm management and production strategies are much more important. The best guarantee for maintaining economic returns, which may be entirely adequate for the owners, is the mere control of large extensions of farm land. Total returns can remain quite substantial, even if the yields per tarea are low and declining, if large areas are under cultivation. Any management improvement which they introduce or any change in their scale of operations must not sap the basis of the traditional economic, social and even political relationship prevailing between them and their sharecroppers and day laborers. New farming techniques are probably likely to be adopted only if they do not disturb in any fundamental manner the rural environment's social stratification and traditional labor relations.

Among the factors which affect the growth of the agricultural sector in general is capital investment. Although crucial, it seems to be one of the least known and explored. No adequate statistics are available on private investments on a regional or national scale. But according to our data, based on private interviews with 10 big landowners from Villa Gonzalez, La Canela and Jacagua, a good working hypothesis is that tobacco latifundios are starved of liquid capital funds.

Probably one of the reasons for agricultural stagnation is the lack of private investments. Obviously, minifundist holders and most of the middle peasant owners involved in a family enterprise earn incomes which preclude

savings and thus investments since their capital resources are low or non-existent. Although the total fixed and working capital on the large estates is considerably larger, it does not seem necessarily adequate. This is primarily because of latifundists' tendency to spend their profits on consumption goods or in other ways not related to tobacco or other crop's harvests. The few cases examined indicate that the big landowners keep little of their income for investment in their properties, thus supporting this hypothesis.

Few exceptions to this generalization may be found in the Villa Gonzalez municipality. Here the landed elite numbering from 8 to 12 maintain a business (negocio) like attitude towards their tobacco harvest. Efficient management, plus technological advancements, and even capital investment and financial undertakings, contribute to higher yields and bulk tobacco operations. In addition, several of them control a number of criollo tobacco local packers thus augmenting their range of operations from the production to the packing sphere. Nevertheless, their control of great extensions of land plus the following factors have created a conflict situation in the zone. The factors are: the utilization of traditional labor arrangements and social forms of relationship (for instance, sharecropping and the compadrazgo networks) for their business enterprises; and their landholdings forcing the development of a rural proletariat contingent upon wage labor either in their fields or in their local packers.

Labor Organization

Sharecropping Arrangement:

With the increase in landholding extensions, the most culturally significant difference between minifundist plots and their counterparts is the frequent alteration in farm social organization. Minifundist peasants and most of the smaller middle owners--those whose farms range from 80 to 150 tareas--conduct a family enterprise. This, however, is not the case between tobacco latifundist

and other production units. They can not work their own land on a family base, nor do they maintain a subsistence economy. On the other hand, this is the case with the sharecroppers in their fields.

TABLE 27

LABOR FORCE EMPLOYED IN 653 TOBACCO FARMS IN THE CIBAO REGION, 1971

FARM AREA (tareas)	TOTAL # FARMS	ONLY KIN MEMBERS	%	ABOVE ALL KIN MEMBERS	%	WAGE LABOR	%
80-800	577	156	(27.03)	161	(27.90)	260	(45.06)
800 and more	76	5	(6.57)	9	(11.84)	62	(81.57)
TOTAL	653	161	(24.65)	170	(26.03)	322	(49.31)

Source: data elaborated from Secretariado Técnico de la Presidencia 1972: group IV, p.11a.

The most common labor organization among middle and big tobacco growers is the special form of land renting known as aparceria (sharecropping). Although this arrangement is practiced by all production units it is most frequently employed by middle and large land owners. Ironically sharecroppers, normally landless and minifundist peasants, are not able to afford the normal lease contracts of \$10.00 to \$20.00 annual average lease per tarea. Thus, ironically, they pay 50% of their crop sale to the landowner for the use of the land.

Sharecroppers, known as colonos, or medianeros, or aparceros, normally find two main problems in obtaining the land under a normal lease contract. First of all, landowners prefer the aparceria system in contrast to the leasing of their land. This is primarily because it increases their profits even when it is more time consuming. Secondly, that the lease contracts have to be paid in full at the time of their signing; but the lack of financial resources of a normal sharecropper precludes his control of the total lease money at the beginning of the season. The contract, if accepted, is usually signed in the Agricultural Department and offers freedom to the lessee for harvesting whatever crop he considers best.

TABLE 28

SHARECROPPING PRACTICE IN 294 TOBACCO FARMS IN THE CIBAO REGION DURING THE 1971-1972 SEASON

FARM AREA (tareas)	TOTAL # FARMS	SHARECROPPING IN OWNER'S LAND				OWNER WORKING A PLOT AS SHARECROPPER			
		YES	%	NO	%	YES	%	NO	%
1-32	115	17	(14.78)	98	(85.21)	69	(60.00)	46	(40.00)
32-80	115	36	(31.30)	79	(68.69)	74	(64.34)	41	(35.65)
80-800	55	48	(87.27)	7	(12.72)	6	(10.90)	49	(89.09)
800 and more	9	9	(100.00)	--	--	--	--	9	(100.00)
TOTAL	294	110	(37.41)	184	(62.58)	149	(50.68)	145	(49.31)

(Note: 294 producers were verbally asked whether or not they had given some of their land under the sharecropping arrangement, and whether or not they themselves were working in another plot under this arrangement. The percent figures correspond to the number of producers in each category. The geographical origin of the minifundist producers is given at the bottom of table 24. That of the remaining middle producers in this table is: Villa Gonzalez (9), La Canela (7), El Ingenio (6), Pontezuela (9), Licey al Medico (10), Jacagua (9), Meca (5). Finally, the ten big landholders come from Villa Gonzalez (4), El Ingenio (2), Moca (1).

To offer an example of the economic disadvantages of the sharecropping arrangements in comparison with land leasing, let us consider the case of a 35 *tareas* *aparcero* from Tamboril. Don Genaro harvested 27 *tareas* of *criollo* tobacco with a yield of 58 qq. Seven *tareas* of secondary crops --yuca and beans-- were intermixed with the tobacco along with eight *tareas* of bananas having an annual yield of approximately 19,200 bananas. He sold the tobacco at \$30.00/qq., and 14 thousand bananas at \$18.00/the thousand (the remaining platanos were consumed in his household with the explicit authorization of the landowner). The secondary crops intermixed with the tobacco were given to him to supplement his household diet. Thus, his produce amounted to \$1,740.00 and \$2,500.00 respectively. Of the total \$4,260.00, 50% was given to the landowner in compliance with sharecropping stipulations. The remaining money --\$2,130.00 went to Don Genaro for payment of production costs and household annual expenses. If the land had been rented at \$15.00 per *tarea*, then the lease would have been \$525.00; a net difference of \$1,995.00 with actual sharecrop payment.

Aparceros of minifundist and smaller-middle tobacco landowners usually receive a plot of land varying in size from five to 30 *tareas*. Probably small landowners turn some of their already scarce *tareas* to the *colono* either because: (i) he is trying to help the *aparcero* by providing him with some land to work; (ii) the owner cannot afford the cost of harvest production by himself; or (iii) he has a non-agricultural source of income in a nearby town or in a city; and (iv) still another possibility is that the landowner's old age impedes him from directly working the land. The first alternative is frequently verbalized among symmetrical *compadres* and kin members. Economic reasons working to the owner's advantage might also interfere in their decision of conceding sharecrop land besides social and traditional practices of generalized reciprocity. But evidence of this was not found during field work.

Sharecroppers from minifundist and smaller-middle owners are normally members of the owner's adaptational network. They receive the land either under an a medias or an a tercias arrangement. In the former option, which is the most widely practiced, the arrangement calls for a 50-50 division of the income returning from the sale of tobacco, but not of production costs. Out of his share, the aparcero pays all production costs except the construction and repair of the tobacco shading house. The second alternative, the a tercias arrangement is almost disappearing. It calls for two thirds of the income returning from the sale of tobacco to be given to the sharecropper who then will be responsible for all production costs. Of the 35 sharecroppers --30 a medias and 5 a tercias-- asked which alternative they preferred, all agreed that the a medias system is most beneficial for the worker. The extra one third share from the tobacco sale allocated in the a tercias arrangement does not cover the extra costs under the sharecropper's responsibility, thus further shrinking their already scarce profits.

The sharecrop arrangement does not grant the aparcero the freedom to cultivate the crops he might desire. They are either told to plant all the land in tobacco, or are allowed to use some tareas for market or for household secondary crops. In the second alternative, they will be told whether the sharecropping arrangement applies to the income returning from all the crops or only to that of the tobacco production. Sharecroppers who also happen to be minifundist owners would like to harvest most of the tobacco in their own plots and the secondary crops in the sharecropped land. The rationale behind this is that tobacco is the best income resource they have and thus will not have to divide it if harvested in their own lands. This opportunity is not granted to them.

There might be some variant arrangements in sharecropping deals. For instance, in Janico and San Jose de las Matas sometimes aparceros are given the

land for a period ranging from two to three years and they are asked to retain the 50% income share of the landowner. Meanwhile, they are expected to take care of all production costs and to replant the sharecropped land with pasture grass (pangola) for future cattle raising. Some agronomist informants estimated that the value of the land duplicates with pasturage. On the other hand, labor requirements will decrease with cattle ranches thus forcing the peasants and sharecroppers out of the zone.

Generally, sharecrop arrangements among all production units are basically the same. Only the high frequency of sharecropping among big landowners, and the division of some production costs will vary. Specifically, tobacco entrepreneurs, contrary to traditional practices, will try to maximize their profits through irrigation and the employment of pesticides, fertilizers, and better quality seeds. Thus, they usually divide the cost of these investments with the sharecropper. The rationale being that in this way they guarantee the use of these ingredients by the sharecropper thus increasing their tobacco yields.

According to our data, minifundist tobacco peasants seem to accept sharecropping because they need to supplement their own plot's income returns. A result of this income liability on their part is the attachment of strategic adaptational importance to the access of land, and the maintenance of face to face relationships with landowners. Inevitably, in the case of landless and minifundist peasants sharecropping for big landowners, this organization of labor compels individuals to become dependent on others in a hierarchical fashion. In this structural arrangement, patron-client relationships predominate behind the highly personalistic labor and favor exchanges taking place between the units. From this arises a scale of structural networks by which agricultural units are differentiated. At the same time, sharecroppers become involved in labor transactions which cripple their financial resources with the payment of a 50 % of the crop's return.

TABLE 29

SOCIAL ORIGIN OF 80 SHARECROPPERS OF TOBACCO LAND OWNERS IN THE CIBAO, 1971-1972

FARM AREA (tareas)	TOTAL SHARE- CROPPERS	STATUS SHARECROPPER		SOCIAL RELATIONS OF SHARECROPPER WITH LANDOWNER			
		Minifundist	Other	Member of owner's inner-adaptational network	or of owner's foremen and other farm share- croppers inner- adaptational net.	not previously acquainted	Other
1-32	9	6 (66.66)	3 (33.33)	9 (100.00)	--	--	--
32-80	26	22 (84.61)	4 (15.38)	21 (80.76)	--	--	5 (19.23)
SUBTOTAL	35	28 (80.00)	7 (20.00)	30 (85.71)	--	--	5 (14.28)
80-800	15	11 (73.33)	4 (26.66)	7 (46.66)	6 (40.00)	--	2 (13.33)
800 and more	30	24 (80.00)	6 (20.00)	14 (46.66)	15 (50.00)	--	1 (3.33)
SUBTOTAL	45	35 (77.77)	10 (22.22)	21 (46.66)	21 (46.66)	--	3 (6.66)

(Note: The sharecroppers were verbally asked whether or not they owned privately some land besides the sharecropped one. In addition, whether or not they knew their landowners before starting their present day arrangements with them. If they answered affirmatively, they were further asked to identify the ties uniting them if any.

Minifundist sharecroppers' geographical origin is : Tamboril (11), Pontezuela (4), San Jose de las Matos (9), Moca (11). The 45 sharecroppers from middle and big landowners belong to a group of seven farms: 5 from Jacagua and El Ingenio, and two from Villa Gonzalez.)

Big Landowners Sharecropping Arrangements:

Sharecropping arrangements in large farms normally follow this pattern: the land is divided into independent colonias (colonies) with a sharecropper in charge of each one. Each colono receives from 30 to 100 plowed tareas plus the necessary tobacco shading houses. Frequently there is a colono who is also considered the farm's foreman encargado. His prerogatives run from recommending other aparceros to the landowner (el patron); to supervising other sharecropper's labor and harvest, to collecting debts for the landowner among the workers on the farm. For these extra labors he receives a monthly cash payment which might range from \$75.00 to \$150.00.

The social origin of sharecroppers for large landowners seem to be the same as that from minifundist and smaller-middle owners. They are normally minifundist owners in need of extra income or landless laborers. The main difference between the two sharecroppers is that on some occasions those working for a big landowner are introduced to him by the foreman of the estate or by another sharecropper and do not have a closer relation with the owner at the moment of starting to work.

On his sharecropped land each colono is the equivalent of an owner. He contracts day laborers, buys the necessary food for them, determines their daily wages and administers the production money. The colono will usually employ as day laborers members of his inner-adaptational network plus members at large from the community. In addition, he will feel free to call upon his own nuclear family for free labor. In the midst of this operational freedom they will be supervised by the landowner (or his foreman) in each phase of tobacco cultivation.

Middlemen do not advance money to aparceros of big landowners, nor do they buy their crops from them. Instead, any advanced money they might require either for production costs or for household needs, is weekly provided to them

by the landowner. The latter obtains the money from a bank in the form of a production credit or, in fewer instances, from his own savings. He will redistribute the money to his sharecroppers without any interest attached to it. During the tobacco season an individual record is kept of the money each colono takes in advance from his 50% share of the income of the tobacco sale.

The money advanced for household needs --food, sickness, clothes-- normally ranges from \$10.00 to \$15.00 per week. This advancement is analogous to a weekly income under wage labor conditions in an urban environment; and in itself it is more than what the colono will make day laboring even if he were able to find work seven days a week at \$1.50 per day for a whole season. For many sharecropper peasants the security of this weekly advancement -- which is optional-- will be the main motivation behind being a colono to a big landholder. As they usually say, even if there is no profit from this labor at the end of the harvest, at least they have subsisted one more year. Landowners are well aware of this fact.

At harvest time, the landowner, or one of his nuclear family members, directly contacts an export house and proposes his farm harvest. Because of the bulk of tobacco being transacted, higher prices than those at the market are obtained, benefiting both the aparcero and the owner. The tobacco is then transported to the warehouses at the buyers' risk and expenses. During the transaction, the colono does not normally intervene nor does he receive the money from the sale immediately.

Once the transaction has taken place, the sharecropper record is consulted for liquidation. The advanced money and the crop's expenses are subtracted from his 50% share of the income obtained from the sale of his tobacco. The remaining amount of money is given to him as the season's profit. When good prices favor the sales, it is frequent for owners to offer an extra cash bonus (regalo) to those colonos who ended the year with some profit on their record.

Not all colonos' records show profits at the end of the season. Those who were not able to cover the debts with their tobacco sale share present a relative risk to big landowners. Because of the last figure in these colonos' record will be in the debit and not in the credit column, they are commonly referred to as cruzados (crossed over). If the colono does not reimburse the owed money, or if for two consecutive years he is in the debit column, he will probably be told to leave the farm and thus be replaced. In most cases, the debts are not recovered and have to be borne by the landowner. The main reason for this is that the colonos normally lack capital resources to reimburse or be forced to reimburse the debt. In order to evade cruzados sharecroppers at liquidation time, landowners maintain a close supervision of each colono's harvest and control of their seasonal debt accounts.

An Estimate of the Operations of a Sharecropper and His Big Landowner:

In order to provide a clearer picture of big land owners' and aparceros' operations, an example from a big tobacco estate follows. A.E. is a sharecropper of don X who harvested more than 1,800 tareas of Cuban, criollo and olor tobacco during the 1971-1972 season with the assistance of 48 colonos. A.E., being a brother-in-law of one of don X's compadres who already was his colono, was offered 68 tareas of land with 3 shading houses of 14 varas conuqueras each (1 conuco's yard = 2.5077 meters). To harvest this parcela he received the free assistance from his wife and three male children. In addition, he contracted day laborers. The arrangement with don X stipulated an a medias contract. From his share, A.E. will have to cover all production costs with the following exceptions: (i) the cost of land plowing and of the shading house repairs which will be covered by don X. (ii) The cost of fertilizer, water and soil poison, seed beds, and irrigation water, plus the food and wages for laborers during tobacco hampering labors (enceronada), and the hampers themselves (cerones). The payment of costs will be divided between A.E. and don X in equal shares.

From September 11, 1971 to July 22, 1972, A.E. received RD\$2,712.48 from don X for production costs and personal and household expenses; the latter averaged \$12.00 per week. The 68 tareas solely harvested with criollo and olor tobacco yielded: 46.48 qq. of criollo tobacco; and 87.98 qq. of olor tobacco. The olor tobacco was classified by don X thus yielding: 16.92 qq. tobacco. The olor tobacco was classified by don X thus yielding: 16.92 qq. of type FF; 10 qq. of type F; 18.71 qq. of type A; and 42.35 qq. of type P.

In La Tabacalera factory, one of the two leading factories manufacturing tobacco for the national market, olor tobacco prices were: \$65.00/qq. for type FF, \$55.00/qq. for type F, \$45.00/qq. for type A, and \$30.00/qq. for type P. Meanwhile, Inetab, a criollo tobacco export company, was buying criollo tobacco at the market price of that time: \$30.00/qq.

Don X decided to offer these two companies the bulk of his criollo and olor crop --3,521 qq.-- but only if they improved purchasing prices. Final sale prices were agreed at \$47.00/qq. of olor tobacco, and \$33.00/qq. of criollo tobacco. The logic behind the one price for all olor tobacco types being that from previous yield tests in his own farm, don X knew that 55% of his olor harvest (1,380 qq.) was type P tobacco at that time only \$30.00/qq.; and 45% of the remaining types. The sale of the tobacco at these high prices represented only for don X an extra profit of \$6,007.50.

The sale of A.E.'s olor tobacco provided an income return of \$4,135.06; and that of criollo tobacco amounted to \$1,533.84. But because he had already asked don X for \$2,712.48 in advanced money for household expenses and production costs, his profits for ten months of work were \$121.97. Because he was granted a \$50.00 liquidation bonus, his final profits were \$171.97.

Don X tobacco income estimates are: If the farm yielded 3,745 qq. of tobacco --2,510 qq.-- of olor, 1,011 qq. of criollo, and 224 qq. of Cuban tobacco-- the total sale would have been \$160,000.00; thereby his 50% share

being \$80,000. His expenses might be estimated as follows: if he had a \$50,000.00 production credit from the Agricultural Bank, the credit's interests might well have risen up to \$2,270.00. His share of production costs may be estimated at \$18,000.00. Of this amount \$4,000.00 would correspond to land preparation and another \$4,000.00 might be estimated for shade house constructions and repairs; the remaining \$10,000.00 of production expenses account for those specific costs which were agreed to be paid by both don X and his sharecroppers (such as fertilizer, hampers, irrigation water). Finally, if six of the 48 colonos ended the season cruzados, don X's losses could have been increased by an extra \$1,500.00. In all don X's expenses amounted to \$21,770.00, thus leaving him an estimated profit of \$58,230.00.

Sharecropping Among Big Landowners and Labor Alternatives:

The sharecropping organization is preferred by landowners to any other labor organization such as the por administracion system which provides for every worker in his estate to be a wage laborer. Several other advantages in the aparceria organization are frequently mentioned. First, the sharecroppers find themselves in a person to person relationship with the owner. Secondly, the aparcero is not a mere worker selling his labor, but a semi-independent unit which maintains a direct relationship with both land and product, thus increasing his interest and initiative under the aparceria arrangement. Thirdly, the aparcero is in a co-responsibility position with the landowner himself; hence, the bigger the crop's yield the higher his final returns. For these reasons it is expected that the sharecropper will take more interest and care of the delicate tobacco leaves just as if they were his own.

In spite of these advantages some landowners complain that under the aparceria arrangement they have to provide colonos with some tareas of land to harvest household crops. Thus available terrain is lost for the main crop. But even in these cases landowners know that the aparcero's nuclear family labors in

the tobacco fields without any payments at all in a variety of labors. The reason for not asking a wage for their labor hours is that this practice will increase the production costs which the colono will have to cover. But in a por administracion arrangement they will ask for a wage just as any other day laborer.

A greater advantage of this sharecropping organization resides in economic terms. Under this arrangement sharecroppers help the owner to finance a share of the harvest; if the owner were running his estate under the alternate por administracion arrangement, his profits would be lowered. The por administracion arrangement calls for all workers in the farm to be day laborers with a proportionate number of encargados (foremen) who are paid weekly for their services on a year round basis. All production costs are paid by the landowner and profits return only to him. In some cases profits are divided with the foremen according to liquidation arrangements --ranging from two to five per cent of the profit from the tobacco grown in each foreman's plot.

Returning to the example of A.E. and don X, let us imagine that they were working on a por administracion arrangement and the former was one of the foremen with a weekly pay of \$15.00 --normal wages for foremen range from \$15.00 to \$20.00-- plus breakfast and lunch during six days of work. In the actual case we have seen that A.E.'s 68 tareas yielded \$5,668.90 of which he received \$2,834.45 corresponding to his 50% share. Production costs running on A.E.'s share can be calculated by subtracting from the \$2,712.48 which his record showed as withdrawn for household use and production costs. The amount he used for household expenses: roughly \$504.00, estimating that he received an average of \$12.00 per 42 weeks (from September 11 to July 22 when the tobacco was sold). Thus his share of production costs for 68 tareas of tobacco amounted to \$2,208.48.

If don X were running the farm under the por administracion arrangement

this \$2,208.48 would be his own debt plus the other costs normally covered by him under the a medias arrangement. He would also have to pay A.E. his weekly salary, which only for the tobacco season amounts to \$630.00. Thus, the 68 tareas of land harvested by A.E. under a por administracion arrangement would cost don X \$2,838.48 besides the normal production costs which he already finances under the sharecropping arrangement.

This new cost differs from the 50% A.E. actually received under the aparceria contract to cover costs by only \$4.03 on the deficit margin. In other words, under the por administracion arrangement the 50% share normally allocated to A.E. under the sharecropping organization does not provide a profit to the landowner nor is it even able to cover production costs. This situation would be more critical if he has to pay the latter's nuclear family labor.

The perception of large landowner's sharecroppers of the aparceria organization has been phrased by a Villa Gonzalez informant: Ei traibajo dei apaiceiro e como un esclavo; poi ei raincho, airada i insecticiida, me quitan ei sudoi. This informant, however, and 29 other sharecroppers of a large landowner in Villa Gonzalez, El Ingenio and Jacagua, when asked whether they would prefer day laboring to sharecropping, all answered negatively. Both for economic and social reasons the aparceria labor arrangement is better for them than day laboring. Economically, they not only have a weekly income normally higher than that of a day laborer, but they have the opportunity of obtaining an end of the season liquidation profit. At the same time by sharecropping, they maintain a steady employment in contrast to the day to day living of the agricultural laborers. Furthermore, they maintain a direct contact with the land and a personal relationship with the landowner. From the links with the latter, they expect a number of favors protecting them throughout the whole year.

This is not to say that their position is comfortable and that they will not like any change in their adaptational network. But only that their condition is more secure and stable than that of day laborers. Among the changes they would like to see taking place in their present day environment they mention their desire to own the sharecropped land, or to increase the size of the plot already owned by them if this were the case. At this time it is too early yet to predict if the agrarian law #289 recently approved by the National Government (March 1972), will actually change the fate of colonos and change the sharecropping system. It does provide for the illegitimacy of any sharecropping contract which might propose to the colono to harvest less land than the necessary for subsistence (60 irrigated tareas, or 100-150 non-irrigated tareas?). It offers them the option to purchase the sharecropped land, under certain conditions, with the financial help of the Dominican Agrarian Institute. This purchasing option if accepted by the sharecropper is unappealable by the landowner and will take place whenever both sides agree to it at a price determined by the Agrarian Institute and approved by the landowner. At the same time, aparceros are granted use of the land as long as they maintain their status of sharecroppers. In other words, under normal conditions they cannot be removed from the land as long as they maintain the agreement--thus freeing them from any arbitrariness from the owners.

At the end of fieldwork, aparceria contracts were signed in the presence of officials from the Agrarian Institute under similar conditions to those existing in previous years. The two main differences were that now the contracts were written and public agreements including an optional purchasing clause favoring the sharecropper. The landowner was free to sign the contracts or not, but in any case the sharecropper could at any time choose to purchase the land if so desired; by signing the contract a fixed date of the land sale is established unless the sharecropper signs renouncing his privilege.

If this law is enforced, new sharecroppers will probably not be taken by landowners in order to evade the colono's option to buy the land and his legally granted access to the land. In this situation, the por administracion system will probably become more popular among large landowners. Evidence of this was obtained in Villa Gonzalez where members of the landed elite were trying to dislodge old sharecroppers and re-organize their labor organization by introducing the por adminstracion system.

One of the labor arrangements most dear to sharecroppers, in contrast to the aparceria and the por administracion organizations, is the por liquidacion agreement.. Although not being presently implemented, it is usually mentioned by both aparceros and landowners. The liquidation organization is a variant of the aparceria arrangement, but would produce higher profits for the sharecropper if implemented. Formally, it calls for all production costs to be covered by the tobacco income returns, and the profits to be divided in equal shares (50-50) between the sharecropper and the landowner. The colono's rationale behind this labor strategy is that they presently have to pay more production costs than the landowner does. If the net profit is equally divided, instead of the money returning from the tobacco sale, then the aparcero profit share will increase. This labor organization would work on the assumption of an equal partnership between laborer and owner.

Harvest Finance

As in the case of minifundist tobacco peasants, middle and big landowners' tobacco operations are also contingent upon production credits. Their ability to control and have access to financial resources will affect their farm production. Without production credits they would be unable to crop their lands or would have to reduce their operations to their own saving abilities. Usually, the capital asset of their lands is a sufficient guarantee for bank

credits and other forms of financial assistance.

On the other hand, by controlling the finance money and administering it, they maintain a closer supervision upon the sharecroppers. This supervision, indirectly, is a guarantee to obtaining credit since most banks, and even middlemen, do not extend production credits to a sharecropper because of the financial risk they represent. To do this, the bank requires from the landowner responsibility for the credit reimbursement. The landowner would not assume this responsibility, which he needs to take in order to secure the credit, if he were going to administer the credit himself. The consequence of this is a tighter control upon the sharecropper, and financial responsibility for the landowner.

Normally, a smaller-middle criollo tobacco peasant (controlling roughly 80 to 150 tareas) will receive financial assistance from a middleman like other minifundist peasants, or from the Tobacco Institute. If he were harvesting Cuban tobacco on his land, he would probably be financed directly by an export house or again, by the Tobacco Institute. Criollo transactions are taken care of by the peasant landowner and the purchasing middleman in the former's shading house. Since all the curing and bulking of the tobacco takes place in the landowner's shading house this fact gives him an extra source of direct control over the last phase of tobacco production and its transaction. With the small harvests and the resulting reduction in bargaining power, market price prevails in these negotiations. The tobacco is considered to be sold once the middle man authorizes the owner to mojar (wet) the bulked tobacco and hamper it at an agreed price. Sharecroppers, if existing, once they have indicated to the landowner that the tobacco is ready for sale, will not normally intervene in the negotiations. The middle landowner will liquidate him once the middleman transports the tobacco out of the shading house and pays for it.

On the other hand, big landowners and tobacco entrepreneurs do not deal

with middlemen. They receive financial support from private banks or through the official production credits channelled by the Tobacco Institute; thus they will sell their crop directly to an export house trying to take advantage of their purchasing power. If harvesting Cuban tobacco, the export houses dealing with this tobacco variety will also offer the producer another source of credit normally under the form of a contract providing for production credits and stable sale prices.

Curiously enough, export firms do not want to finance big landowners producing criollo tobacco because of the strained relations resulting from the transactions with these more independent production units. On the other hand, big landowners prefer the marketing freedom they achieve through a bank credit to the restrictions tied to the financial arrangements with an export house. In contrast to this situation, good relations seem to prevail between the export house and big landowners harvesting Cuban tobacco under contract arrangements. The difference probably resides in the price fluctuations between the two markets: while Cuban tobacco prices are more stable and even fixed in some instances in the contracts regulating relations between producer and buyer, the criollo market prices fluctuate throughout the season according to the supply and demand of the product. Under these circumstances it is more important for the big producers to maintain their freedom to bargain their product.

CHAPTER V

MIDDLEMEN LEVEL OF ARTICULATION

One of the most enigmatic presences in the criollo tobacco industry is that of the middlemen (known as corredores or intermediarios). Although peasants themselves, they are looked upon by outsiders as the originators of minifundists and smaller-middle peasants stagnation. On the other hand, it is not uncommon for export houses to blame them for harmful marketing practices and dubious personal reputation.

Middlemen are commonly known as corredores (runners) not so much because of their broker's role, but because of their geographical mobility. They go from a field parcela to the warehouse and back to another conuco, always being on the go for a tobacco harvest. They are small-scale merchants operating with the financial support of an export warehouse. With purchasing money obtained from the latter, they buy tobacco from minifundist and middle land holding peasants and transport it to the warehouses. As a dependent unit of the warehouse they are not expected to resell the tobacco nor to speculate on its price, but only to procure the crop on a commission basis.

Social adaptational network

The social origin of middlemen is exclusively from the peasantry; furthermore, they are overwhelmingly minifundist and small-middle tobacco producers in need of supplementing their income and/or aspiring to a better living. In some cases they also occupy official posts in their own communities

such as local mayors (alcalde pedaneos), or members of a religious lay organization, or even officials from a peasant organization. These cases, however, are not the norm.

The average landholding control of 63 peasant middlemen from three different warehouses -- in Gurabo, San Jose de las Matas, and Canas - was of 89.7 Tareas of land. All sixty three expressed as their main reason for being involved in middlemen operations the need to increase their plot's income (hacer dinero). Only seven of them had other sources of income in their communities; three were local mayors, one was president of a Catholic community parish organization, and the remaining were involved in peasant's cooperatives. This group of 63 sharecroppers was part of a larger group of 70 middlemen. Surprisingly, two of them were not landowners but landless day laborers, and the remaining five were sharecroppers of minifundist peasants who have left their nuclear families in charge of production.

In relation to their own lands, middlemen have three main alternatives. These are as follows: (1) they will crop them with tobacco and leave their nuclear families in charge of production; (2) transfer the land to sharecroppers; or (3) produce in the plots some crops which do not require as much labor and time as tobacco itself thereby freeing them of agricultural duties. In any case, once their middlemen operations begin, their time will be fully pledged to the acquisition of tobacco.

In possession of wide social networks, middlemen are normally well known in their local communities because of their inner-adaptational networks and resourceful personalities. The personal relations maintained during the year with tobacco growers and/or some members of the latter's inner-adaptational networks will determine his middleman role. These social

TABLE 30

MARKETING BEHAVIOR OF 120 MINIFUNDIST AND SMALLER-MIDDLE TOBACCO PRODUCERS IN THE CIBAO REGION, 1971-1972.

FARM AREA (tareas)	TO- TAL	PREFERS TO SELL TO		PRICE DIFFERENCE OF BUYER.		ACTUALLY SOLD: TO MIDDLEMAN					TO OTHER
		Middleman	warehouse	\$29.00/qq. but a <u>compadre</u> .	\$30.00/qq but a <u>conocido</u> .	KIN	RELATIVE	GOD- FATHER	FRIEND	STRANGER	PARTY
1-32	50	47	3	34	16	19	6	15	9	-	1
32-8	50	42	8	31	19	18	4	18	7	3	-
80-150	20	10	6	9	11	8	2	4	4	-	2
TOTAL	120	103	17	74	46	45	12	37	20	3	3

(NOTE: This group of producers was presented with the following set of alternatives:

- (i) "If at selling time you are given the opportunity of selling your tobacco either to a middleman or directly to the warehouse, and both offer you the same prices, to whom will you sell your harvest?"
- (ii) "If at selling time a compadre of yours offers \$29.00/qq., but a person known to you (a conocido) is offering a higher price of \$30.00/qq., to whom will you sell your tobacco?"
- (iii) The final section of the present table identifies the relation existing between peasant and the person to whom he actually sold the tobacco. At least in six cases the middleman was both a kin member and a compadre. These instances were reported under the kin category. In seven other cases he was both a friend and a compadre, but these cases were reported under the latter's category).

The private relation of trust and confidence within this kin network is naturally translated into respect and cooperation in the more public realm of the inner-adaptational network. This adaptational system is most effective and self-assuring in market relations where the customary practices of cooperation and public laws give way to economic interests and advancement of self-interests.

In this context, the middleman becomes a culturally significant unit. He is something like a transformational system in itself integrating both the peasant social organization and the outside market world. In this perspective they are cultural brokers for they stand guard over the crucial junctures or synapses of relationships which connect the local system to the larger whole. The middleman provides a way out to the peasant's tobacco without disturbing his adaptational networks or exposing him to impersonal market relations. The wider his social networks the broader his commercial operations. If local peasants know him on a personal basis and are able to identify him in the context of an inner-adaptational network, then they will permit business-like transactions to take place between them.

Warehouse environmental handicaps.

Warehouses also require from middlemen the maintenance and expansion of their social networks within the community. For them, peasants in contact with their middlemen become a potential tobacco clientele. The main reason behind their contingency upon middlemen is twofold. The first is the land-holding control of their tobacco suppliers. The second is their inability to reorganize peasants marketing practices. While one of the most strategic aspects of warehouses environmental adaptation is the procuring of sufficient tobacco to purchase, they have to operate amid an alien social organization

of minifundist peasants. A great number of small harvesters of criollo tobacco have to be contacted, financed, supervised, and persuaded to sell their crop to one of the competing warehouses in the zone. Warehouses, however, have neither the personal contacts in the peasant communities nor sufficient personnel to get in touch and personally involved with the necessary number of minifundist suppliers. In this context middlemen guarantee the warehouses the necessary supply of tobacco they need to operate instead of leaving them exposed to the spontaneity of a mass of small producers. At the same time they will be responsible for reimbursing the money advanced by the warehouses to minifundist producers to assist them with production costs.

Warehouses have maintained the nineteenth century strategy of employing middlemen to secure tobacco. Each export house places its warehouses in the vicinity of a tobacco zone. Normally two and three warehouses, each one dependent upon a different export packer, are grouped together. Each warehouse will select an average of 30 to 80 middlemen from the zone representing different communities and families, the number of middlemen fluctuates according to the warehouse's volume of operations. They will receive cash in two accounts: first, to advance to small producers during the lapse of the harvest; second to buy the greatest possible amount of tobacco. Through this arrangement the warehouses expect to reach out to the producers and secure enough tobacco.

Two of the most cherished characteristics in a middleman from the point of view of the warehouse are: (i) his commercial resourcefulness in order to compete with other community buyers for the peasant's crop; and (ii) the control and maintenance of a wide social, adaptational network in the community, and even in the zone. From this he might secure his normal clientele

and be introduced to other growers outside his original range. Honesty is only the third characteristic expected from a middlemen. Its relative importance resides in the influence of their marketing practices upon field tobacco price and the risk involved if they do not reimburse the advanced and the purchasing money. As the president of an export firm phrased it during fieldwork: "Lo importante de los corredores no es que no sean unos ladrones, sino que compren tabaco. Pa'eso le avanzamos el dinero, pa'que compren tabaco; la mayor cantidad de tabaco, mejor para ellos y para nosotros".

The nature of middlemen's work

The third variable associated with tobacco's middlemen dependence upon their social adaptational networks as a core energy resource, is the nature of their income returns. Middlemen work under a commission arrangement contingent upon the volume of purchased tobacco. Thus, the higher the volume of purchased tobacco, the higher their returns. Their possible profits, then are associated with the number of peasants from whom they purchase tobacco, and the bulk of their harvests.

Normally, price incentives although necessary are not sufficient motivation for minifundist peasants to sell their tobacco to a particular middleman. The latter will always try to face the competition from other middlemen, by keeping his purchasing price on an equal level with that of other buyers. This further reduces the price variable as a determinant of transactional arrangements. In this situation, the buying control of a middleman and his operation's profits are closely associated with each middleman's social resources.

Purchasing niches and Zones of Influence

Middlemen operations start at the time of the construction of the seed

beds, to say the least. They contact future tobacco harvesters, offer them their services, pledge financial support if needed during harvest time, and in some cases even grant them labor assistance. At the end of November and early December, coinciding with transplanting labors, middlemen start contacting the warehouses. They drop by the tobacco warehouses, speak to the person in charge, and obtain their support during the coming season. The person in charge of the warehouse probably knows them on a personal basis or if not they are introduced to him through a third person known personally to both of them. Contracts are sometimes signed between the warehouse and the buyer but normally they lack legal support. Other times a verbal arrangement prevails in their mutual relations. The main accord being that, unless explicitly granted the permit, the middleman is to buy tobacco exclusively for the warehouse.

Warehouses normally take one, at most two or three, middlemen from each peasant community in order to diversify their areas of contact. At the same time the rule is that middlemen from the same warehouse do not compete for the same tobacco. They divide their areas of operations under the guidance of the person in charge of the warehouse. This rule might break down at times during the season. Nevertheless, warehouse management tries to maintain some order in the buying procedures of their middlemen and normally they are successful in keeping independent areas of operation for every middleman by being well informed of their operations. Therefore what appears a disorganized and uncontrolled operation is actually a structured process relying upon the warehouse's information of their middlemen's activities and spheres of influence.

Curiously enough, some export firm officials do not recognize this phenomenon. They refer to the anarchic situation in the purchasing operations

of their middlemen. In their opinion once the money is given either to be advanced or to purchase a harvest the money disappears with no security of ever coming back again. The information of 14 Gurabo middlemen's purchasing niches, and the market relations of two warehouses in San Jose de las Matas and Gurabo and in addition that from a local packer from Villa Gonzalez, indicates that this is not the case.

The same might be said, although with some reservations, in reference to tobacco warehouse's zones of influence. Although there is no explicit rule prohibiting warehouses from purchasing tobacco in any zone, a rational division of purchasing areas is perceivable not only in the operations of the middlemen of one warehouse, but also of the warehouses themselves. Two main reasons might account for this. First, the middlemen control of their purchasing areas. If one warehouse has access to some middlemen in control of wide inner adaptational networks and broad social relations, then it will be difficult for a second group of middlemen to compete with them in the same purchasing niche. This situation is most evident, for instance, in the local communities (parajes) of the towns of Janico and San Jose de las Matas basically controlled by one export company through the middlemen networks of one purchasing warehouse. Also in the communities of Gurabo, Pontezuela, and Jacagua, where an almost rational division of purchasing niches exists between four export packer warehouses. Secondly, it is more profitable for the companies to implicitly divide among themselves tobacco zones into nearly independent purchasing niches. In this way competition --already evidenced by the presence of almost 15 export firms each one with an average of 3 to 6 dependent warehouses, plus 35 local packers-- will be considerably reduced. As a result prices can also be more or less controlled and tobacco purchased according to specific demands.

This rational, although implicit and not invulnerable, division of

purchasing zones among the warehouses also results from their geographic allocation which makes them contingent upon a specific group of local middlemen. In any case in newly opened tobacco zones, or in the operating zones of warehouses from export firms who have been forced out of the market, or even when a new export firm wants to get into the market, competition increases and new zones of influence and niches of control have to be gradually re-established. For instance, during the 1971-1972 season a local warehouse in Tamboril started buying criollo tobacco. In order to compete successfully their strategy was one of offering middlemen of any other warehouse both relatively better prices and receiving their tobacco without as many quality requirements as competing warehouses. They were hoping to obtain their necessary supply of tobacco and integrate a network of middlemen thereby under-cutting other nearby warehouses purchasing operations.

Advanced money

Once he has obtained money from the warehouse, the middleman starts advancing money to peasants. This money is handed out free of interest, is advanced on solicitation, and does not carry any employment restrictions. As previously mentioned, the only condition attached to it is the peasant's obligation to sell his tobacco back to him; but this implicit selling agreement applies only if the middleman offers to the peasant the regular market price of that time. The logic behind this provision is twofold. First, it is expected that the peasant will reciprocate the favor. Thus this strategy assures the middlemen a harvest of tobacco for purchase. This harvest in turn represents a purchase commission. Secondly, it is the most secure arrangement for the recovery of the advanced money. At selling time the middleman will get the tobacco and pay the peasant the difference between the harvest cost and the owed money. If it were not for this control mechanism at selling time,

experience shows that it would be most difficult to collect peasants' debts. This is because of their lack of either capital or financial resources. If a reimbursement of the advanced money is not obtained, the loss is suffered by the middleman who has to return the money to the warehouse at liquidation time.

For this reason, the middleman does not advance money to any peasant indiscriminately. As a rule, a middleman does not offer money to minifundist peasants representing a high financial risk; nor to a peasant whom they know has already taken money, or who is going to ask an extra advancement from another middleman. This would find the peasant with a conflict of interests at selling time. Every peasant asking for advanced money will also have to be known by him personally or be introduced by a third person who might be accountable on his behalf if necessary. In the same way, sharecroppers will receive money only if the landowner makes himself responsible for the transactions and reimbursement of the advanced money.

Data on the operations of 30 middlemen from San Jose de las Matas, Gurabo, Moca and Canas, indicate that they advanced money to landowners ranging from 10 to 100 tareas of harvested tobacco with an average of \$10.00 to \$15.00 per tarea. This was a very conservative advance since the average tobacco price for the field work season was \$26.00/qq. with an average yield of two quintals per tarea. Also middlemen did not give money to more than one third of the tareas of tobacco in each farm. The 30 middlemen advanced the amount of \$8,590 for an average \$1,286.33 per buyer. The total number of peasants benefiting from these advances were, according to conservative estimates, 664 tobacco producers with an average of \$58.11 per peasant.

Not all the peasants who sell their crop to a middleman have received an advance from him. In fact, rough estimates indicate that an average

middleman, purchasing roughly 600 to 1300 qq. of tobacco per season, advances money only to one third of the peasants from whom he purchases the tobacco. His contacts to non-financed peasants is achieved through his inner-adaptational network and his broader social network. He will secure the clientele of this group through the customary flow of favors and personal relations as previously mentioned.

purchase money

Middlemen might advance money to the producers as long as they consider it opportune. But normally when the barresuelo leaves are ready for harvest, they will stop advancing money and the first phase of the purchasing period starts, the tiroteo phase. From this moment on, if the peasant wants any more money he will be asked to sell the barresuelo harvest. The average price of these leaves is \$12.00 to \$15.00/qq. The tiroteo phase lasts normally from middle April to May. During this time there is only a minimum tobacco price fixed by the export houses and the buyers do not purchase total harvests but only the barresuelo leaves. The second purchasing phase lasts normally from June till the end of August; it is known as the cosecha (harvest) phase. This cosecha phase is the most important since it is at this time that the peasant is expected to sell his whole crop, and not only some leaves. While it lasts, the middleman has to make the most to secure tobacco and is normally closely supervised from the warehouse in his purchasing operation.

During the purchasing period, the middleman's job consists of keeping track of every single tobacco harvest in the community and passing this information on to the warehouse. They are expected to know (1) the quality and harvest practices of each peasant's crop, (2) when it is available for sale, (3) the market prices of other warehouses, (4) the whereabouts of competing buyers, and (5) any service which a peasant might require. This information

is kept current through daily visits to peasant plots and farms, and through constant interaction with landowners, day laborers, and sharecroppers.

In the mean time, his relations with the warehouse will also change. Now he will not ask for advance money but for purchasing money. In return the warehouse will ask him for tobacco before every new disbursement. The sole justification for the middlemen is their purchasing ability in a minifundist producing environment. In cases of conflict between the warehouse and a middleman during the purchasing period, the former will not pressure for a reimbursement of the owed money. The pressure is on the buyer to bring (tirar) the expected purchased tobacco. The money has to be invested in the acquisition of tobacco harvests, and not in personal vices of the middlemen. Also it cannot be used for market speculation against warehouses own interests.

During the purchasing operations warehouse and middleman interests coincide at moments but conflict at other times. They coincide since both units are contingent upon a purchase commission for their income. The warehouse manager normally has a commission ranging from \$1.50 to \$2.00 per quintal of purchased tobacco, while the buyer receives \$1.00 per quintal. Thus both units are working for the volume increase of the purchased tobacco. But conflict is present in their relationships from a number of sources. First, it is to the warehouse manager to buy the greatest volume of tobacco at the lowest possible price since he normally works under a fixed, although flexible, budget. This is not the case of the middleman who only has to ask for the necessary amount of money without taking into consideration warehouse budgets.

Secondly, conflict also arises from middlemen being cruzados at liquidation time since warehouses are responsible for the recovery of the money given to the middlemen.

The source of the tension is in the middleman's inability, or lack of interest, in reimbursing the warehouse for the money granted to him in order to subsidize his operations. If the money is not reimbursed by the buyers, then the warehouse manager will have to reimburse it to the export house from his own commission. The same cruzado problem results between peasant and middleman, and between sharecropper and landowner. In all cases the problem is the lack of capital and financial resources for which the cruzado could be pressured in order to repay the contracted debt. This is not to say that he is not pressured, but only that in most cases not even the fake of a bribed army or police member is able to secure the money. Legal action is almost never taken in these cases.

A third source of conflict springs from the middleman re-selling the tobacco. In other words, they will fake the market price and re-fix it at their own risk. This is accomplished either by offering the peasant a lower purchasing price than the official one, or by delivering the tobacco to the warehouse at a price higher than actual purchasing price. Through the first stratagem the middleman is shrinking the peasant's legitimate profit margin; while through the second strategy, he is inflating the market to the disadvantage of the warehouse. In either case, he augments his profits.

According to our data both stratagems are employed by middlemen according to special circumstances. The secret to their operations resides in the middleman's strategic position in the market structure. He has access and control of both extremes of the market: the buying warehouse and the producer peasantry. This environmental position gives him exact market information frequently unknown to one or both of the units involved in the transaction.

To offer only one example of this practice let us consider the

following actual case. Middleman N. bought 36 qq. at \$28.00/qq. in Jacagua for a total of \$1008.00. N. informed the warehouse that the bulked tobacco in the peasant's shading house when hampered amounted to less quintals than previously estimated. At this moment he delivered 20 qq. immediately to the warehouse at actual purchasing price; this delivery represented for him a \$20.00 commission. The remaining 16 qq. of tobacco was kept by him in a small warehouse near his house. Seven days later when the market price rose to \$30.00/qq, he delivered the tobacco at this new price, thus earning his commission (\$16.00) plus an extra \$32.00 because of the price difference. In the mean time, the 20 qq. previously delivered by N. cost the warehouse not \$28.00 qq. but \$50.40/qq. since with the \$1008.00 purchase money the middleman had only bought 20 qq. and not the 36 qq. estimated.

Still in other cases, the middleman will purchase the tobacco but inform the warehouse that a competing middleman is bidding on the same tobacco at higher prices, thus he needs to raise his offer in order to guarantee the harvest. In other instances, he might just tell the warehouse that the peasant is asking a higher price than he has been authorized to offer. In whatever case, the cultural significance of these operations rely in the power the middleman has through his contacts at the production as well as at the purchasing level.

Warehouses normally know of these and other marketing practices of each one of their middlemen. But often they are not willing to stop them either because they are good bulk buyers of tobacco, or because they are afraid that, if suspended at the middle of the purchasing period, they might not reimburse the advanced money which normally averages from \$1200.00 to \$3500.00 during the purchasing period for an average buyer. In other cases, this practice is not habitual on the part of the middleman thereby not harming warehouse

interests. If the warehouse decides to suspend his dealings with a middleman he will be so informed at liquidation time. It is not unusual for other warehouses to contract the suspended middleman if he has an established clientele at the expense of any risk his marketing practices might present to them.

Some meddlers, as a policy, do not reimburse all the owed money either at the end of the tobacco season or during the season itself. Instead they keep promising to pay the debt the next season. In this fashion, they try to force warehouse (amarrarlos) in preserving their services regardless of their marketing practices. Sometimes they are successful for one or two consecutive seasons at most. This strategy was best phrased by an informant who said: Con ei aimacen ay que estai cruzado; solo asi te dain liberta pa'hacei lo que uno quiere.

The actual execution of the previously mentioned practices by middlemen does not imply that all buyers do them. Rough estimates from our data indicate that only one out of every five or six middlemen habitually resort to such marketing practices. On the other hand, a false idea would be to assume that middlemen always have the upper hand in their transactions with the warehouses. In fact, they are closely controlled by the latter through two strategies: (i) control of purchasing money disbursements; (ii) and direct information on the middleman's operations in their communities. The warehouse's main strategy is to control the middleman's operations and maintain a record of each middleman. Curiously, written records have less authority than memorized accounts, and are not as carefully kept as the latter. The warehouse will at all times try to know how much money the middleman is given, to buy an estimated harvest of how many quintals, from whom, and at what price.

The strategy and structure of the money disbursement is approximately as follows: the money will be given to the middleman only in proportion to the amount of acquired tobacco he has already delivered to the warehouse. Because buyers' activities are supported by the purchasing money, the warehouse will try to provide him with funds sufficient to bargain and obtain tobacco harvests, but not enough to give him the capacity to retain the tobacco and wait for better prices.

Thus every release of money is normally closely considered, and is far from being arbitrary. An estimate of the tobacco quintal to be purchased is made by the middleman and the person in charge of the warehouse; and an authorized purchasing price is given to the buyer. This is decided on the basis of the market conditions of supply and demand and the competition of other export companies. In addition, the person in charge of the warehouse will check how much tobacco he has bought -- and if none, he will inquire why not -- since the last money disbursement. With this information he will be able to estimate how much purchasing money the middleman still retains with him. Contingent upon these three variables, the amount of money to be approved for release by the warehouse is agreed upon.

Through this procedure not only is the release of money controlled, but also the buying price of the warehouse is set. The tobacco received from the middleman, normally, will only be accepted at the warehouse at the purchasing price stipulated between middleman and the person in charge at the time of the money disbursement. Thus, if he pays a lower price to the peasant, as long as he does not try to re-sell the tobacco at a higher price, it is of no concern to the warehouse. Every time he comes back to the warehouse, they will go through the same process for every new money release and tobacco transaction.

The money release strategy is complemented with a second mechanism of control: information of middleman's activities during the purchasing period. The warehouse person in charge obtains this information either through conversations with other middlemen or by going to the field periodically. Middlemen provide the warehouse owner with an information network so accurate and precise that the latter is normally well informed of virtually all of his middlemen operations and of concrete tobacco transactions in his community. Normally each middleman reports his own and other buyer's operations to the warehouse manager on a personal basis thus establishing a mixed relation of trust and dependence. Through this personal link with each middleman, the person in charge of the warehouse is able to build in them a sense of importance and respect from which an attitude of cooperation and responsibility in the warehouse well-being flourishes. Once this is achieved, the flow of information, and of favors, is all but abnormal.

Still, it is normal for the warehouse manager to periodically visit middlemen communities and purchasing areas in order to further supervise his operations. He will try to learn about actual tobacco transactions, other warehouse middlemen's prices in the zone; future harvest for sale; and about arrangements between middlemen to sell tobacco either to him or to pass it over to another warehouse or tobacco factory. In general, he is interested in every significant operation of the middleman in his own environment. If necessary he will pressure the corridor either by speaking to him directly, or by contacting members of his inner-adaptational network. These local visits, not only increase the knowledge the warehouse management has of middlemen's operations, but also help to verify the data obtained through the middlemen's own network of information. They also reinforce the person to person relationship established between the warehouse manager and the middleman.

A preliminary topology of middlemen

The analysis of the records of two warehouses randomly chosen for the seasons of 1970-1971 and 1971-1972, including 67 middlemen working consecutively for them during both seasons, suggests a preliminary typology of tobacco middlemen. On the basis of the volume of tobacco purchased, three types of middlemen could be distinguished: subsistence, average, and entrepreneur middlemen.

Subsistence corredores comprised 16 of the 67 middlemen. Their annual average tobacco purchase in a season ranges from 150 to 600 qq. of tobacco. The available information indicates that at least 12 of them are minifundist peasants themselves. Normally, their accumulated purchase commission and the money they owe to the warehouse at the end of the year balance each other off, leaving them without a significant profit or debt. Available information confirms the assumption that they buy tobacco not so much as a way to increase their annual income, but as an alternative to sustain themselves during the tobacco season. This they do by employing a share of the advance purchase money for household needs, thus obtaining a regular income throughout the season. This debt they repay at liquidation time with their accumulated commission money in the warehouse. In this perspective their strategy is to buy only the necessary volume of tobacco to cover their debts with the warehouse.

A second group of middlemen are those purchasing an average of 600 to 1300 qq. of tobacco per season. This group of average middlemen includes 39 of the 67 middlemen. The information on 21 of these middlemen indicates that none are conuquero land holders but are owners of parcelas and middle size tobacco farms. Their accumulated purchase commission at the end of the tobacco season when compared with their debits to the warehouse normally

show a sizable profit ranging from \$400.00 to \$800.00. This figure, obviously represents but a rough approximation of their actual profits. For instance, if some peasants did not reimburse to them the advanced money, or if they either lowered or increased the purchasing price, or if they bought a la flor tobacco, or any other such forceful practice. Data is not available on how many of these average middlemen did not reimburse owed money to the warehouses, but it indicates that at least 8 of them re-sold and classified their tobacco habitually.

This information supports the assumption that they buy tobacco for the business it represents. Their strategy is to acquire more tobacco than the needed amount to repay the warehouse its money, including whatever they might have taken from them for household and personal expenses. Their legitimate profit return comes from the accumulated tobacco purchasing commission in the warehouse.

The third group, that of the entrepreneurs, consists of 12 middlemen in the sample. They are professional buyers because they will purchase not only tobacco but any other crop once the tobacco season is over. Their average seasonal acquisition of tobacco exceeds the 1300 qq. Available data on seven entrepreneur-middlemen reveals that five are middle landowners, and the remaining two are parceleros. These seven middlemen had an average of six comines (second middlemen) each one buying tobacco for them outside their traditional purchasing zone. Six of the seven for whom data is available classified their tobacco, bought a la flor, and habitually resold tobacco to the warehouses. At all moments their main strategy was to keep the capital working. Thus their accumulated commission at liquidation time, when compared with their debits to the warehouses, far exceeded the latter.

The analysis of the record and operations of entrepreneur middlemen implies that they use every possible strategy to increase their profit, and that they are highly successful in this. Their legitimate profits from the records could roughly be estimated as ranging from \$950.00 to \$5,200.00. To this amount it has to be added whatever extra-income they obtained through marketing practices other than those approved by the warehouses

If this preliminary typology is representative of middlemen, it indicates that "harmful" marketing practices of middlemen are normally associated with higher purchasing scale operations. Also the range of operations of subsistence middlemen is probably limited to the purchase of tobacco from the members of their own inner-adaptational networks. In contrast, the entrepreneur middlemen rely on a wide network of comines to augment their purchasing niches. Finally, some of the middlemen's legitimate profits are not as irrational as normally thought. This is especially true if it is realized that their commissions have to cover their own household and personal expenses, plus some of the handling costs not embraced by the transportation money which the warehouse grants him in addition to his purchasing commission.

Middlemen Interactive Quasi-groups

One of the most interesting aspects of middlemen adaptational networks is the "interactive quasi-group"; (for a discussion of this concept, see Meyer 1966). Local second middlemen (comines or piches), hamperers (enceronadores), tobacco classifiers (clasificadores), plus independent truck drivers (choferes), are the most significant figures of these quasi-groups. This interacting set of people are centered around the middleman. The actions of these members are connected only in so far as they are a part of the social network of the middleman or one of the quasi-groups' members. The temporary network is formed for the purpose of assisting the middlemen in various functions he has to perform in

his role, and thus permitting him more freedom of movement as well as increasing his scale of operations.

Like the middleman himself, classifiers and hamperers are from a rural extraction. In contrast to the middleman they normally are day laborers and do not own land. Enceronadores are the most common workers of any middleman. A middleman will normally have two to seven hamperers working for him. Their job is to hamper the tobacco once it has been sold to the middleman, but it is done with the assistance of the landowner and some of the sharecroppers and day laborers if they are present.

Through the performance of this labor in the tobacco shading houses, the hamperers liberate the middleman from a necessary operation and give him the opportunity to attend the purchase of other crops, to deal with the warehouse, or to take care of any other necessary details. Although not intended, hamperers can also control the quality of the purchased tobacco, and any possible adulteration of the hampers content which might artificially increase the tobacco weight and thus its cost. A hamper's income varies considerably. He starts working at purchasing time, and on a daily basis. Average income for them ranges from \$0.15 to \$0.25 per quintal of tobacco hampered; still other arrangements call for \$0.50 to \$2.00 per working day.

In some instances, the enceronadores' role is transformed to that of a tobacco classifier; but usually there are two different persons performing these roles. While the labor is similar, their job is not. Classifiers, normally one to three per middleman, operate in the buyer's own warehouse. These are small countryside houses or even rooms where some average middlemen and almost all entrepreneur middlemen gather their purchased tobacco to either desnatar (classify the tobacco into criollo and olor tobacco) or to speculate with it by retaining the purchased tobacco until its price increases thus re-selling it to the warehouse as previously seen.

The rationale behind the desnatar practice in which the classifier is an important unit, is that good quality criollo tobacco can yield inferior types of olor tobacco (tiene clase). These normally bring a higher price; secondly, the olor tobacco factories will buy this criollo tobacco as olor tobacco since normally they do not have sufficient supply of tobacco. The inferior types of olor tobacco acquired from a good criollo harvest are usually types A and P. Their prices are normally higher than that of criollo tobacco with the abnormal exception of the months of July and August of 1972, when criollo market price rose to \$30.00/qq., while olor tobacco type P (picadura) was paid lower, ranging from \$28.50 to \$30.00/qq. In normal seasons, the desnatar practice is a sound economic strategy in which some, but not all, criollo middlemen get involved.

Those middlemen who classify their tobacco have to take a double risk. First, the harvest being classified must be of good enough quality to produce sufficient class tobacco to justify their labor and time investment. In some cases, middle landowners producing criollo tobacco classify their own tobacco thus increasing their profits. But paradoxically, minifundist tobacco producers do not. Although data is not conclusive on this point, it seems that they do not want to risk investing money in classification labors without the certainty of being able to obtain tabaco de factoria (olor tobacco) in return. Sometimes they also mention their lack of knowledge to distinguish different types of tobacco. Nevertheless, the main reason probably is that they are pressured by middlemen not to do it.

The second risk middlemen have to take with desnatando criollo tobacco is the warehouses who do not approve of this practice. Their main objection being that they would be paying a high price for a lower quality tobacco. Furthermore, their own warehouse classification for better quality tobacco will yield lesser Percentage of types #1 and #2, thereby decreasing their profits when selling the

tobacco to the manufacturers.

The third unit integrating the middleman interactive quasi-group is the truck driver. Normally he comes from a semi-urban environment and owns the vehicle. With one or two peones (day laborers) he leases his services to a group of subsistence and average middlemen in a purchasing zone nearby; entrepreneur middlemen frequently include in their scale operations a private vehicle. The truck driver average income is \$0.25/qq. transported from the tobacco shading house to the warehouse. Any weight reduction (merma) before the tobacco is received in the warehouse or any hamper which gets lost is usually the responsibility of the middleman.

In those cases where the truck is not able to get near the peasants' ranch because of road conditions, for instance in the hills of Janico and San Jose de las Matas, or in remote communities as Las Cuevas de Cevico, the tobacco is first transported by animals to the road, and then picked up by the truck. This process is known as recuas, and each bestia (animal) carries two hampers at a time amounting to \$0.25 each; if the trip is more than three or four kilometers, transportation will increase.

Although a middleman's responsibility, transportation costs are financed by the warehouses. They normally add to the middleman's commission an extra \$0.50/qq. for transportation costs, and provide them with cerones (hampers, averaging \$0.32 each) in which the tobacco is transported. Because the truck driver only receives \$0.25/qq. of the \$0.50/qq. for transportation costs, the middleman pays his hamperers from the remaining \$0.25/qq. If the hamperer gets \$0.15/qq., then the extra \$0.10/qq. still remains in the possession of the middleman. In other words, of the \$1.50/qq. the buyer receives from the warehouse (commission and transportation costs), he will probably keep \$1.10/qq. If he employs a classifier, his operational costs will go higher, but also his returns.

Of all the members of the middleman's quasi-group, the comines or piches are in the most commercial relationship with him. They frequently operate outside the middleman's original purchasing niches (fuera de zona) thus amplifying his range and scale of operations. For the most part they are local store owners, but still others are officials of peasant local organizations, usurers, and local majors. Data is not clear in how the association between the middleman and his comin originates. But the analysis of ten middlemen operations from Pontezuela and Tamboril suggests that they frequently are friends (amigos) from infancy times when living in a former community together, or that they are relatives. In any case their arrangement establishes for the comin to buy tobacco in his community and the comin will also inform him of tobacco transactions occurring in the area. The former will receive both advanced and purchasing money from the middleman to subsidize his enterprise, and if necessary, will also employ cash from his own commercial enterprise. In return, he will receive either a \$0.50/qq. purchasing commission, or any profit resulting from the price difference when reselling the tobacco to the middleman; if the price margin is ample enough they might divide it according to specific share arrangements.

Comines' purchasing operations in the community vary from those of the regular middlemen. They do not have the same degree of control of the latter over his original purchasing niches. Instead, they normally exploit any debts the peasant might have with them on account of other commercial, financial or legal practices, in order to buy their tobacco.

Future of the Middlemen Distributive Role

Tobacco middlemen, especially when buying in their own purchasing niches, maintain a network of person to person exchanges with their clientele which persists over time and endures longer than any single transaction. Along with market competition determining price in relation to supply and demand, there

are slight but significant exchanges of privileges between them ranging from matters of sale preference to obtaining cash, and a variety of other services. If this picture is correct, it in no way contradicts the assertion that tobacco middlemen --especially average and entrepreneurs-- have fully developed commercial motivations. In fact, the use of personalism in their transactions is economically sound and simply reflects awareness of the characteristics of the environmental social organization to which they have to adapt.

The purchasing practices of the middlemen with their strong personalistic element affects the nature of the internal marketing activity of criollo tobacco. Not only are peasants affected by the middleman's control of financial resources and market relation, but even the export houses consider their interests affected by their price speculations based on the twofold control of cash and tobacco harvest which their privileged position in the industry's distributional system grants them. Shephard, who has studied Caribbean internal economies, soundly warns against any unqualified judgments that, regardless of local conditions, the middleman is economically deleterious:

It is dangerous to assume as some cooperative enthusiasts do, that middlemen are parasites who interpose themselves between producer and consumer and levy a toll on both without rendering any service ... We must not lose sight of the fact that middlemen come into existence in response to a demand by producers and consumers for the essential services they perform. They are induced to undertake these services in the expectation of profit and if the prospect of profit permanently ceases, they cease to operate. The fact that many middlemen earn profit cannot be accepted as conclusive evidence of inefficiency or of excessive charges for the services they perform ... It is possible, of course, to eliminate particular types of middlemen, but... (their) services are indispensable and the question is whether these services can be performed more efficiently by specialist middlemen or by organizations of producers (cited in Mintz 1956:22).

It is all but revolutionary to admit that the present day market practices of middlemen have to be rationalized, and probably gradually eliminated, with the development of organizations of tobacco producers or even specialist middlemen. But this possibility is still remote amid a minifundist criollo

production characterized by a significant absence of production credit to these small producers and by local unstable producers' organizations.

On the other hand, two questions are most relevant at this junction. First, what shall be done to employ economically the labor freed by the reforms if they ever become successful. And even most important, will the reforms of marketing practices broaden economic opportunities for the producers, or disadvantage small producers by favoring the export houses? It should be remembered that some middlemen, intensify competition and reduce chances for zonal monopolistic control by the export houses over the supply of any group or individual; especially since they operate with a relative margin of freedom in their purchasing niches because of environmental social organization, and apparently without unconditionally submitting themselves to the organized price-fixing schemes of the warehouses.

CHAPTER VI

EXPORT LEVEL OF ARTICULATION

The Dominican crop of criollo and Cuban tobacco is bought and processed by an average of 13 to 15 export houses (casas exportadoras) operating in the country. This operation is accomplished through a network of dependent local warehouses and transactions with independent or semi-independent local packers (empacadoras locales). Once it has been packed, the tobacco leaves are exported through international dealer houses (casas matrices) who either subsidize or provide financial support to almost all the export houses.

These export packers constitute the core of the export level of articulation. Their cultural significance is analogous to the one of the middlemen because of their strategic position in the industry's adaptational network. Like the middlemen in the national environment, export houses conjoin two different environments: the national producers and manipulators of tobacco, and the international dealers in virtual control of both capital and access to manufacturers' markets. The adaptational network of the exporters consists of a set of exchanges articulating both energy resources, tobacco and capital. Thus, their own existence is contingent upon both the purchase and processing of the tobacco, and the financial assistance and marketing cooperation of the international dealers.

At the national sphere, their operations are most significant. During the ten months tobacco season in 1970-1971, these export packers put into circulation approximately \$22.3 million pesos in the Cibao region (cf. El Sol newspaper; Thursday, August 5, 1971). Presently their operations integrate a permanent labor force of 70,000 persons. Because of the nuclear family labor organization

it is calculated to augment to 200,000 agricultural laborers (cf. Casals et al. 1972:9). Rough estimates call for 25,000 producers with a minimum of five agricultural laborers each. On the other hand, each export house employs an average 475 warehouse workers; and each of the estimated 35 local packers have a minimum of 150 workers. The remaining labor force comes from temporary workers involved in transportation and secondary industries of strings and hampers.

As a concrete example of the economic operations of one of these export houses we might consider the investments of the Dominican Export Tobacco Industry (INETAB). In June 1972, the management of Inetab announced that the company was integrated by both Dutch and Dominican capital, but was controlled and administered by the latter. The assets were well beyond one million pesos. At the same time, it was reported a minimum investment of RD\$1.5 million pesos for the purchase of 60,000 qq. of criollo tobacco in the 1972 season. This investment would generate presumably employment at the production level for 9,600 persons, and indirectly to 14,000 agrarian workers. In its own locale they required the services of 21 employees and 300 warehouse workers and in other dependent warehouses 300 workers were laboring (cf. El Listin newspaper, June 15, 1972).

Tobacco Production Costs and Profit Strategies

One of the most vital strategies of the export house operations is the purchase and control of tobacco by zones. The rationale behind this is strictly economic. Since the profit margin is contingent not only upon volume of purchased tobacco but also upon higher yield of better types of tobacco when classified in the warehouses. These better types, such as #1 and #2 in criollo tobacco, and long-fillers in Cuban tobacco, receive higher prices from the manufacturers and thus augment the margin between tobacco cost and selling price. But the increase or decrease yield percentage of the tobacco is closely contingent upon both ecological conditions and labor care of the plant during

harvest. This being the situation, the best option available to the export packers is to acquire the tobacco not randomly but by selecting purchasing zones.

This strategy has become more urgent in the last years amid higher final costs of the tobacco to the export houses. Paradoxically, while the demand for Dominican dark tobacco --but above all criollo tobacco-- is expected to increase during the period of 1972-1980 the exporters face the possibility of losing such markets. For instance, this seems to have been already the case with such tobacco markets as the French and the German. The main reason for this market loss is the sharp increase in Dominican tobacco prices. While Brazil and the Philippines, two of the Dominican dark tobacco competitors, for example, delivered their tobacco to Spain in 1967 at an average price ranging from US\$32.00 to \$35.00, and US\$47.00 to \$48.00 per 100 kilos respectively, Dominican tobacco selling prices were US\$45.00 to \$50.00 per 100 kilos (see UNCTAD 1968:379).

One of the main reasons for these strenuous competing prices seems to be the high costs of tobacco (see table 3f). From 1963 to 1972, tobacco field prices have increased an estimated 92% for criollo tobacco, and 11% for Cuban tobacco thus stimulating peasants to augment their production. While tobacco field prices have sharply increased in the last years, the same seems not to be true either of the tobacco field prices or the purchasing prices in competing countries as compared to Dominican exporter's tobacco costs.

The high cost of tobacco in the field is probably related to a number of variables such as: middlemen marketing practices; export houses' inability to reach price agreements amid low national production and competitive purchasing practices; and finally, their uncertainty of guaranteeing the necessary supply of tobacco to operate and fulfill outside agreements with manufacturers. This complex market situation is manifested through what is commonly referred to as

a war of prices (guerra de precios) among competing export houses for the acquisition of the tobacco.

TABLE 31

AVERAGE PRICE RECEIVED BY THE PRODUCER PER QUINTAL OF TOBACCO 1963-1972

YEAR	CRIOLLO	CUBAN
1963	14.89	46.32
1964	15.65	47.51
1965	14.62	42.65
1966	15.54	40.28
1967	14.21	45.36
1968	15.74	48.25
1969	19.50	51.00
1970	22.64	51.46
1971 (*)	25.00	49.10
1972 (*)	26.00	--

(* preliminary estimates).

Source: unpublished data from the Tobacco Institute

This competition has put out of business more than two export houses in the 1971-1972 season. Also there are concrete indications that at least three of the remaining export packers are either in collusion or already under a joint ownership while at the same time maintaining different management. Other firms have divided their operations. While one deals with Cuban tobacco, the other buys criollo tobacco. In all, the norm is one of overt competition with several behind the scenes alliances.

In this adaptational environment, the national government policy up to the present time seems to have been one of virtual laissez-faire. This is not so much because of a political and economic doctrine but because of technical

incompetence, national political instability and probably because of some dependence on the part of the government upon the volume of dollars (divisas) invested by the international dealers through exporters in the country. In any case, the Tobacco Institute implicitly or explicitly has limited its efforts in technical and financial assistance to producers without interfering with exporters' operations. Its recent response to increasing prices and risk of losing European markets for the country's dark tobacco has been a special effort to increase production in order to augment the supply of tobacco to exporters. It is expected that this policy, in conjunction with the elimination of middlemen, will suffice to stabilize tobacco field prices. This strategy evades any interference with export house operations or confrontation with producers, while signaling middlemen as the source of price inflation.

Nevertheless, some private and official voices have recently called attention to the critical situation in which the Dominican dark tobacco might find itself in coming years if its prices are not stabilized. This is especially critical since other producing nations have been able to keep their costs down and manufacturers seem to be more interested in price than in the quality of the dark tobacco. For these reasons they call for a policy of price harmonization and production controls:

En vista de la peligrosidad de la actual tendencia al alza de precios por razones de la aguda competencia y la tendencia de precios mas bajos en los productos finales hechos con tabaco negro, es indispensable implantar una politica de armonizacion de precios, que, aunque asegure al productor margenes de beneficio atractivos para incrementar la produccion, evite la salida de nuestro tabaco de los mercados europeos... Esta alza como hemos visto puede ser peligrosa en terminos de mercadeo externo y quizas lo mas conveniente seria fijar niveles de produccion de acuerdo a las previsiones de la demanda mundial y conforme a las caracteristicas de esa demanda segun los mercados de posible acceso... (cf. Casals et al. 1972: 4 and 10).

The importance of the tobacco field price in relation to the profit margins of the exporters and for competitive ability with the tobacco of other producing nations can best be shown by the following example. If for matters of

clarity the criollo tobacco is only classified into three types #1, #2 and #3; and its average yield is 10, 50 and 40% respectively, with a selling price average of \$100.00, \$90.00 and \$80.00 per 100 kilos of tobacco, then the average selling price for every 100 kilos is \$87.00. The profit margin of the export house is between the selling price to the manufacturers and the tobacco final cost.

During the last season --1971-1972-- the export house had to pay an estimated average \$26.00 per quintal of criollo tobacco; in other words, \$52.00 per 100 kilos of tobacco. This field purchasing price went further up with middlemen's commission and the cost of transportation of the tobacco to the warehouse: \$1.50/qq., or \$3.00/100 kilos. Thus, for the purchase of 100 kilos of criollo tobacco and its transportation to the warehouse in order to start the manipulation and the packing processes, the exporter had already paid \$55.00; only \$32.00 short of the average selling price. These \$32.00 per 100 kilos will have to cover all the remaining costs of production and packing, plus administrative and financial expenses of the export house as they were estimated in table 15. This provides a profit margin to the exporters. The profit was estimated to range at the time of field work from 3.5 to 7% of the tobacco selling price.

Obviously, the example is only a simplification since most export houses maintain a large scale operation (economia de escala), and they classify their tobacco in more types than here presented. Nevertheless, the fact remains that as the tobacco final cost increases, the export houses' own profit margins shrink. In turn, some strategies are required to improve their own economic interests without losing their competitive selling prices in the international market.

In this situation, at least five alternatives are open to the exporters. They are: (i) to reduce tobacco field costs; (ii) to reduce elaboration and administrative costs; (iii) to force manufacturers to raise their purchasing prices; (iv) to secure higher percentage returns of better tobacco types;

(v) and finally, to buy bulk volumes of tobacco thus establishing a large scale operation.

Tobacco Field Costs

To the present, Cuban tobacco field costs are being stabilized through the practice of transactions made through contracts signed at the beginning of the season by both the producer and the buying exporter. The contracts provide normally for financial and technical assistance plus a tentative selling price. In some instances, the contracts do not provide any selling price and the export house actually operated through these contracts only as a credit source while purchasing its tobacco on the market at harvest time. The only case in which this latter practice was known to be employed was where the financial situation forced the company to appeal to this scheme in order to augment its capital. In any case, the contract strategy eliminates the middlemen. It also guarantees the export house a certain amount of the tobacco production from the beginning of the season without leaving them at the mercy of the competition of the free market to obtain their supply at harvest time. On the other hand, the producer will be guaranteed not only financial and technical assistance, but also a price --normally a minimum price--for his crop. According to data from 30 producers under contract with an export house, this price security is considered by the growers as one of the most significant advantages of the contract arrangement in addition to the financial opportunities which they bring to them. At the same time one of the export packers recognized that there is so much demand from producers to sign a contract with them, that they are purchasing tobacco exclusively from contracted producers.

But this is far from being the case in the criollo tobacco market. Export houses have not yet found a mechanism to stabilize prices in the field. The two main reasons behind the spiralling increase in criollo prices seem to be

the great number of small producers, and exporters inability to maintain price accord between them amid marketing competition. In addition to this they seem unable to guarantee in advance the necessary supply of tobacco to meet export engagements.

This situation has increased the commentaries and explanations for the price situation in reference to monopoly or a cartel division of the market on the part of a few big export houses. It is argued privately that some exporters are permitting field prices to run high to force other companies out of the market thereby protecting their capital investments and control of the market. The assumptions being that these two or three big companies are able to support even financial losses for a relative period of time, and have the ability to control the market if they so desire. Evidence of this strategy is found in discussions, the secret colluding of some export firms, the withdrawal from the market of minor companies, and the decreasing profit margin of the exporters. It is argued that all these variables were also present in Brazil during the last decade and that from an estimated 20 export houses, today only 4 are left in the market.

Whatever the value of this explanation, the fact remains that up to this moment criollo field prices are rising and there is no indication that this situation will change in the coming seasons.

Elaboration and Administrative Costs

The second strategy calls for reduction of both processing and administrative costs. Average estimates of export houses' administrative expenses range from RD\$25,000.00 to \$75,000.00 per year. These expenses are absorbed by increasing an average 3% of the final cost of the tobacco to its selling price. According to the presidents of five export houses, these costs are unavoidable once their firms go into a large-scale operation which depends upon bulk volume

of tobacco. The same can be said of processing costs which are estimated to be 10% of the final tobacco cost. Because one of the pressing problems between export houses and manufacturers is the maintenance of a standard classification and manipulation of the tobacco on the part of exporters, the cost and investment in the manipulation and packing processes are vital to them.

Significantly, local packers' strategy is precisely this, to eliminate administrative expenses and reduce to a minimum the processing costs in the warehouse. In this way they will produce a cheaper tobacco than that of the export houses and will be able to sell their tobacco to them with a profit to both organizations. While local packers' administrative costs are virtually nonexistent, they can reduce their processing costs to an average 4% as compared with exporters' manipulation costs of 10% of the final tobacco cost (cf. table 15). Thus, the rationale behind all local packers' operations is, for instance, to produce for \$76.00/100 kilos, what it will cost the exporters \$84.00/100 kilos in their own warehouses. In other words, to reduce all costs possible, sometimes even at the expense of quality factors.

Manufacturers' Purchasing Prices

If the previous two strategies to reduce the tobacco cost have been practically unsuccessful, especially in the criollo industry, the third one does not seem to be an exception. Sufficient data is not directly able to support this contention. Nevertheless, it seems to be highly probable that export houses through their international dealers have been unable to maintain their profit margin by proportionally raising manufacturers' purchasing prices in relation to their higher costs. Private exporter's estimates from two criollo companies report a tobacco field price increase in the last ten years of almost 92% per quintal, but a slow 57% increase in manufacturers' selling prices. These estimates are supported by table 33 as well as the opinion of the president of another

export house while referring to their profits in the last four years:

Si nuestras ganancias se han reducido a un margen de 5 o 6% anual no es por los corredores o porque le estemos pagando demasiado a los productores; sino porque los manufactureros no quieren comprender que el precio del tabaco y de todo lo demas esta subiendo rapidamente. No se trata de un fenomeno exclusivo en el negocio del tabaco, sino de un proceso inflacionario internacional. Pero sin embargo, ellos se mantienen ahi sin ceder a nuestras necesidades con tal de mantener un precio estable frente a sus consumidores.

Higher Percentage Returns of Better Tobacco Types

The fourth and not exclusive alternative open to the exporters is to obtain their tobacco not randomly but by taking into consideration both the types yielding percentages and their processing costs per purchasing zone. The acquisition of better quality tobacco will increase the percentage of superior types thus augmenting the average selling price and then their profits.

Turning back to our previous example, if instead of obtaining the estimated average 10, 50 and 40% of criollo tobacco types, a company is able to secure a zone with a yielding average of 16, 57 and 27% of types #1, #2 and #3 at the previously indicated prices. Then the average selling price for 100 kilos is not going to be \$87.00 but \$88.90. This \$1.90/100 kilos difference expands the profit margin of the export house and is most significant when operating a large-scale operation. Obviously, the situation is more complicated than this because elaboration costs per type vary, and warehouse classifications are more complex than we have presented. The price mechanisms, however, are the same and thus the example gives an illustration of the value of this strategy.

Not all export houses are able to control the better quality producing zones such as: Cancas la Reina (Tamboril), Juan Lopez and La Laguna (Moca), La Torre (La Vega), La Canela (Santiago), Inoa and Canafito (San Jose de las Matas), or Unijica (Puerto Plata). In such cases they have to export great volumes of low priced tobacco in order to maintain their operations and try to

obtain a profit; these operations are known as un negocio de centavos (a business of pennies). In avoiding this alternative, some export buyers move from one zone to the other, purchasing the better harvests at a higher price than that of the official market price. The rationale behind this is that even when they have to pay higher prices to procure specific harvests, they will recover their investment when the tobacco is classified. Also, their practice will inflate the market to other export houses in their own purchasing zones of influence, leaving them to acquire average type yielding tobacco amid conditions of high final tobacco costs.

Large-Scale Operations

The fifth alternative open to export houses, not so much to reduce the final costs of tobacco, but to sustain their profits, is connected with the nature of their own operations. Export houses purchase seasonally an average of 20,000 to 60,000 qq. of tobacco criollo, and from 15,000 to 25,000 qq. of Cuban tobacco. Through this large-scale economy they are able to multiply their actual profits per quintal, and decrease processing and administrative expenses which further expands their profits. But this large-scale operation is contingent upon two variables. First, the national production of tobacco and the exporter's uncertainty in guaranteeing a sufficient share of it. Secondly, the control of their purchasing networks integrated by local warehouses and local packers.

In this perspective, the export producer's ability to control purchasing zones involves not only guaranteeing better quality tobacco but also greater volumes of it. If the case were that an export company achieves virtual mastery over one tobacco zone, then it would also be in a better position to fix prices. This last event presently is only the exception in some tobacco zones and not the rule. At most, warehouses have been able to preserve zones or sub-zones of

influence for their purchasing operations through the control of purchasing niches by their middlemen networks.

Warehouses

The purchase and manipulation of tobacco for the export packers is mainly conducted through a network of local warehouses with their middlemen. There are different types of warehouses connected with the exporters. Among them, could be distinguished main warehouses, the properly called local warehouses, and purchasing warehouses.

Main warehouses are so characterized because they are normally contiguous to the export house's own offices; therefore, almost all of them are in the perimeter area of Santiago City. They allocate high quality processing equipment, and frequently maintain small scale purchasing operations thereby limiting themselves to processing the tobacco delivered to them by other warehouses. This is mainly the case with those export companies intending to standardize the production and classification of their tobacco thus monopolizing these labors in one warehouse with highly technical equipment. Other companies habitually deliver their better quality leaves to the main warehouses to be treated according to more elaborate curing and classification procedures.

Local warehouses are geographically distributed according to tobacco zones. They are normally placed in the core of a tobacco zone with fair communication access and try to maintain their adaptational influence by means of middlemen operations and through price competition. It is not uncommon to find two or more competing local warehouses near one another. In such cases, if the purchasing zone is an old tobacco area, each warehouse will probably control or have preferential access to specific sub-zones of the environment. These local warehouses process and pack the tobacco they obtain for export. They do not, however, have the equipment nor the skilled labor of the main warehouses. Through this ability to manipulate the tobacco they augment export houses elaboration

capacity and their physical space to operate.

Purchasing warehouses are a strategic device of a few export houses to further gain control over specific purchasing zones and expand their range of operations. In contrast to previous warehouses, these do not process and pack tobacco. Instead, once they purchase the tobacco they proceed to pre-select the leaves and deliver them to a main or a nearby warehouse. They are small scale organizations (3,000 to 12,000 quintals per season) in charge of tobacco in either new zones of production or in what formerly was considered a wider tobacco purchasing zone. In all, they promote purchasing operations in close relation to local social organizations, and further protect the companies' financial investments by transferring to the managers the responsibility for the reimbursement of the advanced money.

The number of these main, local and purchasing warehouses vary from one export house to the other. A close estimate of the purchasing operations of six export houses, three of them dealing only with criollo tobacco, one with Cuban tobacco, and the remaining two with both varieties, revealed a network of six main, ten local and five purchasing warehouses. In all cases, these warehouses were virtually subsidized by their export companies. Thus they are clearly distinguishable from a local packer in that they purchase and pack tobacco for the export houses with the former's money, and do not sell back to them a tobacco already theirs. In other words, as distinguished from local packers, warehouses are dependent organizations of the export packers.

At the beginning of every new tobacco season exporters estimate the national production, their own purchasing ability, and the manufacturers' demand of dark tobacco. Accordingly, they will fix a tobacco quota to every one of their dependent warehouses and will start subsidizing the latter's operations through weekly disbursements of money. These tobacco "quotas" given to the warehouses are most flexible since they result from estimates of their purchasing

ability and the exporters international demands. In fact, they only serve as an indicator to the exporters of how much tobacco they will obtain through each purchasing channel and the investment they will have to assume during the tobacco season. According to actual market situations, the warehouses will be granted the opportunity or not to change the estimates made at the beginning of the season.

The economic relations between export packers and warehouses are carefully recorded in formal and detailed warehouse reports. Weekly reports sent to the former, account for the volume of tobacco purchased during the week and the total amount obtained up to that time in the season including the prices paid, the warehouses own expenses and the other costs to be subsidized by the exporters. This information is further augmented through normal visits by the exporters to the warehouses and other informal means of communication. Thus when the weekly money disbursement takes place, the exporters know with virtual exactitude the situation of the dependent warehouse and its weekly needs. In most cases, the disbursement is only authorized after the warehouse manager personally justifies to the president of the export house previous and coming expenses.

By keeping a record of price fluctuations, tobacco purchased, and the type of tobacco, the exporters will be able to rationally authorize new purchasing prices to each warehouse in view of: (i) the warehouse local environmental conditions; (ii) the regional market situation; (iii) and the exporter's own financial resources and tobacco supply needs. Only the export house can authorize new tobacco field prices, and it is expected that warehouses and their middlemen purchasing operations, would be regulated according to exporters' fixed prices and marketing guidelines.

Curiously enough, some of the patterns of control existing between the warehouse and its middlemen, will now be implemented between export packers and

the warehouses; and practically for the same reasons. For instance, the direct contact of the former's management with warehouses through periodical visits allow the exporters to inspect personally processing procedures, the quality of the purchased tobacco, and to learn about other export companies purchasing practices. At the same time, they reinforce their personal relations with the warehouse manager. Amid these relations, exporters will try to prevent warehouses from desnatar the tobacco and sell better types to olor tobacco factories or to competing warehouses at better prices. In addition, they will prevent the reselling strategem of the warehouses to themselves which might inflate the purchasing price of the tobacco.

The ground and buildings of the warehouses are normally owned by the person in charge of their operations. Frequently these privately owned warehouses, after the tobacco season is finished, will start processing other crops like coffee or corn. Regardless of whether the warehouse manager is the owner or not of the buildings, they are normally either local residents or urban settlers in control of considerable financial, political and social resources in their environments. Through the operations of the middlemen, and the employment opportunities opened by their warehouses, they will further reinforce their assets in the community. It is for their privileged adaptational position that exporters select them to direct local tobacco operations. In a sense, they offer to the latter an operational security non-existent in the rural environments. We might say the greater their local control and adaptational power, the more secure and successful the exporter's operations become.

No matter who the owner of the warehouse buildings is, the export house pays rent, unless it is already owned by them. The warehouse manager normally does not receive a salary from the export house but works on a commission base. His commission frequently ranges from \$1.25 to \$2.00 per purchased quintal. His responsibilities are not only to contact but also to organize processing and

and packing labors. At the same time he is responsible to the export house for the reimbursement of all the money granted by the latter for the finance and purchase of the crop. For this reason, it is not only to his advantage to augment the quantity of tobacco purchased, but also to keep tight control of the middlemen operations. This is particularly true at liquidation time. In many cases, warehouses have to maintain their doors open at the end of the season for smaller quantities of tobacco, and receive them at inflated prices from those middlemen owing them considerable sums of money. Through this strategem, known as chiripeando tabaco, the warehouse manager is able to secure the middlemen's reimbursement of owed money.

Normally, warehouses are managed by members of the manager's inner-adaptational network who are more frequently than not the manager's own sons and brothers. In fact, data from nine of twelve local and purchasing warehouses studied, supports the generalization that warehouses are a family business enterprise supported by the manager's inner-adaptational network just as minifundist plots were at a lower level and scale of operations. The main difference is that the economic goals behind both operating units contrast: family subsistence in one and profit maximization and environmental control in the other. It is for this reason that warehouse organizations become particularly significant. The social organization common to the production and middlemen level of articulation becomes also relevant and efficacious at a higher level of adaptation. The warehouse management is shaped by the inner-adaptational network personalistic approach to environmental pressures. It must be able to integrate and organize both labor arrangements in the warehouse itself as well as outside purchasing operations. For this reason, warehouses have proven to be so successful not only in their purchasing and manipulation operations, but also in establishing information networks with the middlemen and preserving control and assent in their environments. Warehouse managers possess not only control of land, financial resources, and outside community influence, but employ

their energy resources through and in accord with rural social organization, thus reinforcing their adaptational status.

As an example, the importance of a warehouse organization is best illustrated from the following case. During the summer of 1972 an export house which in previous years has gone out of the Dominican tobacco market was trying to resume its operations in the Cibao region. At the moment they were examining two issues in deciding whether or not they would enter into the market of criollo tobacco again: (i) a tobacco field price stabilization which will guarantee them a 10 to 13% profit on their capital investment; and (ii) their ability to secure the services of three local warehouses which, because of their purchasing network, virtually controlled three vital purchasing zones. The rationale behind the latter issue was that the purchasing networks which the warehouse managers had integrated and their local power was not replaceable in order to control those tobacco zones.

Local Packers

Local packers adapt to the criollo export houses' environment by resolving two issues. First of all, the export house is unable to reduce tobacco costs; thus they pack tobacco at lower costs and sell it to them offering the exporters an opportunity to augment their own profit margin. Secondly, exporters are often unable to comply with specific datelines for shipments of manufacturers orders. In either case, they extend the physical plant of the exporters and their range of operations.

For instance, in 1971, a leading export tobacco house was in need of 4,000 pacas (packed tobacco, each pack weighing an average of 70 to 75 kilos) for a coming shipment abroad. The vice-president of the export firm went to a supplier local packer and bought the tobacco at \$74.00/100 kilos. The tobacco cost to the local packer had been \$65.75/100 kilos. Meanwhile, the export house sold the tobacco at \$80.00/100 kilos; the six dollars difference between the purchasing and selling price accounted for transportation and fumigation expenses,

plus exporter's own profit margin.

Normally, local packers operate in the same fashion as a local warehouse. They buy and manipulate tobacco working through their own middlemen network. In some cases, for example, in Villa Gonzalez where local packers are also big land-owners, this middleman dependence is significantly reduced. The tobacco is purchased either directly from the owner's own farms, or the peasants deliver the tobacco directly to them. Local packers' operations comprise an average purchase of 8,000 to 18,000 qq. of criollo tobacco per season, even when the bigger packers might purchase up to 25,000 qq. For their operations they will normally invest from \$60,000.00 to \$150,000.00 per season. Their profits are commonly estimated by informants associated with export houses as ranging from 10 to 13% of their investment.

According to interviews, the general impression is that export companies would like to abolish transactions with local packers. The main reason is that their tobacco processing does not comply with manufacturer's requirements nor standards of classification and the processes are not standardized. Furthermore, in some cases its weight shrinks considerably after having been packed thus increasing the costs of the exporters. Although frequent complaints of this nature are heard, local packer's enterprise seems to be secure at present mainly because of the service they provide for export houses by supplying them with tobacco they need to comply with manufacturers' orders.

The social origin of local packers' owners is normally from the landed elite and other powerful social and economical sectors from urban environments. Their power over rural environments seems to be secured through traditional control of the land and/or capital assets and financial resources. Although there is not sufficient historical data on this point, their role was most significant years ago when international dealers and exporters had to establish their enterprises without previous acquaintance with the Dominican producers and its centers

of powers. In this situation they were contingent upon this social sector to organize their operations. Today their position is no less significant in the national environment, but exporters' dependency upon them has significantly decreased, primarily because local packers are not able to export their tobacco directly and the exporters maintain their own independent warehouse organizations.

Local packers might finance their own operations independently by obtaining a credit from the local banks. But most frequently they make special arrangements with particular export houses. In this way, they secure both a buyer for their packed tobacco and financial assistance for their operations. They become what is usually referred to as a satellite of an export house. Their dependence implies that they sell their tobacco almost exclusively to one export house, and prices are mutually agreed upon with the exporters having the upper hand. At the same time, they are expected to cooperate with the marketing policies of the export house.

In other cases, when the local packers want to maintain their purchasing and selling independence but are not able to, or do not want to secure all their financial credit from a bank, they take a middle position. They will ask for a bank credit plus an advancement from an export house to cover the cost of a stipulated amount of tobacco they will process to the exporters. In this way they maintain a semi-independent status in their marketing operations while establishing commercial links with a specific export packer.

Obviously, the local packers' main economic interest is to operate independently in order to increase their bargaining power at selling time. But this ideal seems to be only a reality to less than seven local packers of the estimated 35 presently operating in the country. The lack of capital and the contingency upon export houses to find a market for their tobacco forces their status to be one of big, but dependent, local tobacco merchants. In fact, local packers' general inability to export their own tobacco is one of their greatest adaptational

liabilities. The main reason for this situation seems to spring out of their limited capital resources both in terms of financial and technical resources.

According to four owners of local packers from Villa Gonzalez and Moca, their restricted access and control of financial resources confines their purchasing operations to a local tobacco zone. If pressured, they could not compete with export house prices. Furthermore, a quality "boundary" is placed on their procedures of processing and packing the tobacco because of the lack of appropriate technical equipment and skilled personnel. This situation is further reinforced by the fact that they have to lower costs below exporters' own costs in order to operate since they are not able to export directly. This situation is critical at the regional level of operation but it is even more critical at the export level since they are not able to maintain direct contact with international manufacturers of tobacco. International dealers are interested in financing bulk tobacco operations and prefer to deal directly with their own export houses rather than purchasing and/or marketing small quantities of tobacco from independent and competing producers. On the other hand, local packers lack sufficient capital to maintain an international selling organization (relaciones comerciales) to market their own tobacco.

Export Houses

Preliminary data indicates that there are three types of export houses regardless of whether they purchase one or both tobacco varieties for export. Considering the financial resources of only thirteen of the nationally operating export houses, they might be classified into: (65%) packing or commissioned exporters (8); (20%) semi-independent or with mixed capital (3); and (15%) independent exporters (2).

Most of the export houses are both subsidized and partially staffed by international dealer organizations (casas matrices). These organizations

guarantee the necessary financial resources to the exporters either in European banks at a 6.5% annual interest and then transfer this money to their commissionist organizations through the Dominican Central Bank, or in local banks at a 9.5 to 10.5% interest. Their subsidies will include tobacco purchasing costs in the field, warehouse production and labor expenses, transportation costs, and any other expenses resulting from the operations of the exporter. Also they will market and guarantee the packed tobacco to the buying manufacturers. Under these arrangements the export house becomes only a dependent packing organization of the *casas matrices*. Their status is similar to that of middlemen and warehouses since their profits are contingent upon a volume of purchased or packed tobacco through a commission on account of either one of these operations --normally \$3.00 per purchased quintal. In some cases, the export house receives a percentage of the amount returning from the final tobacco sale instead of a commission. From this money the administrative expenses have to be covered; management salaries and local taxes are included in these expenses. The remaining money represents their profits.

Because of this financial and marketing dependency, packing companies do not have any power to intervene in price dealings between dealers and manufacturers. Their role is only to deliver the tobacco when so requested and their responsibilities end once the tobacco is shipped for exportation. At the same time, information has to be provided continuously to their respective dealer organizations concerning purchased tobacco, prices, percentage yieldings and market conditions. In this way the dealers will know what their actual supply is in order to meet manufacturers' demands. Interacting with both operating units, export houses and international manufacturers will instruct their export houses in matters of purchasing, manipulation, field prices and export shipments.

The main difference between a commissioned and a semi-independent export house is the constitution of their capital asset. The latter's capital normally

comes from two sources: first, a group of national investors relatively in charge of the company's purchasing and manipulation process, and secondly, from an international dealer house which normally conducts marketing operations plus the opening and maintaining of tobacco markets. This situation automatically grants relative operational freedom to this second group of exporters. For instance, they will normally be consulted in bargaining operations between dealer houses and manufacturers. They might object selling prices and if the opportunity comes or is established they might even conduct tobacco transactions directly with manufacturers without recurring to the assistance and contacts of the international dealers. Also, at the end of the season they have a right to selling profits as stockholders.

Finally, independent export houses finance their operations exclusively on their own account; normally they receive credits from local banks and their assets are owned by national investors. This option appeared, through interviews with the president of one of these companies, to be very difficult. This is because their credit resources have a high annual interest of 9.5 and 10.5%, and are not sufficient to compete purchasing and price pressures of the exporters financially supported or subsidized by international dealer houses. At the same time, their international selling network is reduced to fewer markets since they lack the information and contacts of international dealers. Often these independent houses have to transfer to international dealers the role of marketing their tobacco at the international level; thereby they establish a relationship similar in nature to the one existing between the local packers and dependent export houses.

Interestingly enough, not only the number of independent exporters is highly reduced, but that of export firms conceived and run as family enterprises is also decreasing. Available data seems to indicate, although it is not conclusive on the point, that export houses were organized in previous years for

their national purchasing, processing and packing operations as family firms as are the present minifundist plots and local warehouses. Father-son exchanges integrated an inner-firm structure of trust and confidence amid a highly informal environment where little cultural patterns of cooperation between non-kin existed to guide required relationships, and where political and economic instability has been the norm. While the father trained his sons for future transfer of business responsibilities, their nucleus was further protected by the cooperation of members of their inner-adaptational network. Apart from economical aspects --such as business secrets tightly kept, family incentives for work effort, constant communication, line of authority family reinforced-- the family firm also became a network of strong moral obligations built up for many years.

If the family firm was to compete with large scale tobacco enterprises subsidized or supported by international dealer houses, it will probably have to expand its operations and thus its environmental adaptation. New financial resources, complex purchasing operations and selling networks, and new specialized personnel, all have to be integrated in the firm structure to face a highly competitive environmental market where maximization of profits and capital expansion is virtually the sole goal. Probably because of these environmental pressures, family organized export houses ceded their place to present day relatively impersonal and business-like tobacco enterprises in which criteria of performance are introducing new standards of procedure which are not family orientated.

Regardless of the export houses' inner-organization, this group has traditionally constituted the closest reality to a sector of an oligarchic center of control. In fact, their adaptational network has a broad and more sophisticated range of operations and consequences. Their power over the distributive system of the tobacco industry, and thus over the country itself, is based upon control and access to capital and sources of financial investments, the labor market, and the commercial relations outside the country. To the national government

they offer a substantial source of divisas (dollars) brought to the country because of their operations, and needed by the former to conduct its commercial transactions in the international market. To the labor market, their investments offer employment both in the field and in their warehouses. At the same time, producers depend upon them to sell their crops and to get credit assistance. Even the national government, unless it takes upon itself this function which does not seem probable in the immediate future, is contingent upon these firms to market the national product and obtain dollars for international exchange.

The relations between the group of exporters are complex, and contrary to predictions they do not seem to be a closely knit operating unit in economic and political affairs. Alien exporters working for international dealer houses in the country seem the most aloof from national politics and the organization of the country's structure of power. Their only interest seems to be those related to their tobacco investments and packing operations. Their international dealer houses do not seem to be reinvesting their profits in the country, thus their interests are further reduced to the tobacco industry.

But the same does not hold for national exporters either working independently or in cooperation with *casas matrices*. Their personal family status, as well as their adaptational network depends virtually upon their power resources in the national environment. Thus normally they have to secure their position through direct involvement in national affairs, and influential control of their environment. Their adaptational niches are protected not only through economic and political relations resulting from their tobacco business but also through family and social ties with prominent families and groups in the country. Through these exchanges they develop an inner-adaptational network with wider ranges of influence and authority in the country. These adaptational networks are analogous to the ones operating in the production and middleman level of articulation as well as between warehouse managers; the main difference is the articulation of

interests and environments they articulate and control. As in the panelinha organization described by Leeds (1964) in Brazil, the members of these inner-adaptational networks represent different specific economic interests in the Cibao region and the country as a whole. Thus the control of power on the part of the national tobacco exporters is multiplied and maintained as long as they can successfully compete in the market.

In the market, relations among exporters are strenuous. Today three main market rules impregnate the operations of the tobacco export houses in their adaptational network. They are: secrecy, distrust and competition. This behavioral norm affecting their operations was frankly described by an informant who is president of a tobacco firm. He said: "In the tobacco business there are neither friends nor enemies but only a compulsion to buy tobacco and earn a profit."

This attitude seems to become clearly evident in the incapacity of exporters to cooperate as a group even in matters of supposedly common interest. For instance, price stabilization. Usually at the beginning of the tobacco season exporters get together in order to decide initial purchasing prices. In 1971-1972 they did so again, and agreed to sustain a common market price in order to protect themselves from a price war growing out from stratagems of speculating middlemen and competing companies' purchasing practices. They all agreed on a price and none was supposed to raise it without mutual assent. But in less than one week the agreement was broken and so recognized in a second meeting. No more accords were discussed on this subject, at least publicly, with the proper exception of dealings resulting from allied companies. According to three different informants, the agreement was broken when after the first meeting one of the export house presidents went to one of his dependent local packer owners (a satellite) and told him to start buying tobacco at a higher price. The reason for this being that the agreement was only between export houses, and did not include local packers.

probably because of the market competition between export packers and the lack of formal norms of cooperation, a common saying among tobacco exporters becomes relatively true: "This is not a business for heart achers because from year to year, and from transaction to transaction, everything changes in the tobacco industry." Nevertheless, it is surprising how well informed most companies are in relation to competitor's operations. It is true that most transactions and adaptational alternatives are secretly conducted. But this does not seem to prevent a flow of information which permits other companies to know the whereabouts of their competitors with a high degree of exactitude. Among other reasons, it seems reasonable to assume that this is so because their adaptational networks are much more patterned than usually assumed. They are all contingent upon a common exchange structure associated with the international dealer houses' control of markets and capital, and amid a market run according to the law of supply and demand. Thus extrapolations from one's own adaptational network are also true of other competing exporters, and provide a reliable source of informaton. This structural information is further supplemented by communications coming from warehouses and international dealers.

Table 32 is presented in order to provide a relative idea of the magnitude and range of export houses' purchasing and packing operations. Sale values are not exact because it is a customary practice to fake them in order to evade taxes. (Table 32 follows on the next page.)

International Dealer Houses

If at the national sphere the export houses' adaptational networks are contingent upon the control they have of purchasing zones, at the international sphere they are dependent upon dealer houses. This is the second strategic variable determining the operations of exporters primarily because they have to finance their own transactions and market their packed tobacco through the

TABLE 32

EXPORT HOUSE OPERATIONS DURING THE 1970-1971 TOBACCO SEASON

EXPORT HOUSE	QUINTALS	VALUE (RD\$)
D.T.M.	75,044	2,428,371
Habeeka, c.a.	56,059	1,484,281
Kaubeck, c.a.	48,625	1,314,209
Manipuladora de Tabaca, c.a.	48,913	1,541,288
Empresas de Tabacos Tropicales, c.a.	24,614	491,951
Quisqueya, c.a.	13,439	371,164
FETAB	7,283	321,577
IPHACO, c.a.	6,653	129,661
Felix A. Reinoso, c.a.	620	15,314
COPATA, c.a.	6,535	18,264
INETAB, c.a.	3,987	14,623
Sociedad Comercial Tabaquera, c.a.	12,740	340,289
Victor F. Thomen, c.a.	5,926	171,390
Compania Anonima Tabacalera	30,056	1,107,663
E. Leon Jimenes, c.a.	20,357	724,663
TOTALS	359,251	9,160,507

Source: unpublished data from the Tobacco Institute.

services of these casas matrices. Just as local packers found an end to their operations in the premises of the exporters, now export packers' business ends at the gates of dealer's selling organizations.

International dealers maintain large scale operations not only in the Dominican Republic, but also in other producing countries. Through these operations they acquire bulk volumes of tobacco providing them with bargaining power in front of both national export houses and manufacturers. This control is a

further guarantee for their access and control of credit and capital resources. Dealer houses also sustain a selling organization through which they keep track of tobacco markets and the specific demands and quality requirements of manufacturers. Thus, their adaptational network results in a mapping of both the producers and the consumers environment which is not available to either one. This middleman position provides the necessary credit and capital to finance their purchasing operations as well as the maintenance of a selling organization of brokers. It also enables dealer houses to direct export house operations to the point of even fixing tobacco field prices to national exporters, and as strategically important, to virtually monopolize international tobacco marketing.

Their international marketing procedures are supported by the large-scale of their operations. Manufacturers prefer to purchase their tobacco from these international dealers instead of small independent exporters mainly because they guarantee manufacturers greater quantities of tobacco. This not only satisfies their operational requirements but also provides the maintenance of specific blends and complies with concrete quality standards. On the other hand, independent local exporters will be able to guarantee only their own relatively small volume of tobacco, including fewer varieties and with higher risk of failing to deliver the product in case of crop failure in their own countries.

A second important advantage to the manufacturers' transactions with casas matrices, is the latter's ability to deliver tobacco at lower prices because of their large-scale operations. And, if necessary, they can sustain temporary losses in specific markets in order to over-run independent local exporters' price competition. Another advantage resulting from large-scale operations is that they can sell the tobacco with a 90 to 180 days credit without any major financial hardship. In fact, it is customary among manufacturers, as in Germany for instance, to purchase the tobacco with payment delay. This practice is financially most difficult to independent exporters lacking financial resources

and paying high interests for their bank credit. All these factors are reasons to explain why export houses are handicapped if they ignore international dealer houses in planning their operations.

On the other hand, tobacco manufacturers both in Europe and in the United States, are content to derive their profits from the processing of the product, leaving credit responsibilities, the gamble and the risk of crop failure and the possible tumbling prices to the suppliers. As long as they are assured by dealer houses of the chance to buy enough tobacco to satisfy the requirements of their operations and the overhead involved in these, they will probably avoid (i) heavy investments in cultivation and manipulation in producing countries like the Dominican Republic, or any other investment in general, and (ii) any attempts to suppress international dealer's role.

This situation seems to be reinforced since the manufacturers are not dependent upon the Dominican Republic, or any other single producing country, to supply their tobacco demands. They have no heavy expenditure in capital equipment in producing countries but in their own. As in the case of the sugar industry, where there is much investment in processing equipment, care is taken that the overhead on this equipment will be spread over the largest number of producing units possible. Thus a sugar mill must try to assume a large supply of the unprocessed crop. In order to do this they must own or control the land producing the raw product. In the case of the tobacco industry, this would imply the purchase of great extensions of land eliminating minifundist independent tobacco production as presently practiced. It would probably also mean the substitution of the national distributive system presently integrated by middlemen, local warehouses and local packers. But this capitalist pattern of operations is not presently necessary to manufacturers because of the tobacco supply guaranteed by dealer houses and the absence of manufacturing equipment in the producing countries. Thus the elimination of present day small producers and the complex

distributive system of the product in the national market level does not seem probable to occur.

The same observation is valid in relation to the purchasing operations of the international dealer houses. They do not have to invest in processing equipment, and to evade excessive financial risks and dependence from any one single nation, they do not procure their product from a restricted or exclusive number of producers. If, for instance, the Philippine dark tobacco crop fails, they will purchase the necessary tobacco either in the Dominican Republic, Brazil or any other nation where they may be subsidizing exporters' operations. The international purchasing organization of tobacco (and other crops) liberates the dealer houses from dependency on any country and the risk of heavy investments in any single producing country to secure their purchasing power. But at the same time, this situation seems to preclude the Dominican production level from obtaining a huge accumulation and/or monopolization of land and capital in any one single hand. This preserves its traditional organization in the tobacco zones as contrasted to the productive organization in the sugar zones in the country.

Furthermore, with the absence of huge large-scale industrial capitalism and thereby the need to protect its investments, a cultural overlapping of pre-industrial and industrial cultural patterns result. A number of normally recognized pre-industrial patterns (cf. Sjoberg 1955) remain amid industrial manufacturing, financier activities, and market relations. The type of social structure required to develop and maintain a form of production utilizing inanimate sources of power is quite unlike that present today at the production, middleman and warehouse levels of articulation in the tobacco industry. At the very least, extensive industrialization requires a rational, centralized extra-community economic organization in which recruitment is based more upon universalism than particularism, a class system which stresses achievement rather than ascription, a small and flexible kinship system, a system of mass education which emphasizes

universalistic rather than particularistic criteria and mass media.

Modification in any of these elements affects the others and induces changes in other systems like those of religion and social control. Most probably industrial large-scale capital investments with its factory orientated production and control of great extensions of land, not only requires a special kind of social structure within the community but would provide the means necessary for its establishment. But these elements accompanying industrialization are not present at the production, middlemen and sectors of the export level of articulation. Not even a "rural proletariat", with the exception of day laborers, is present; their predominance seems to be hindered by the market orientated independent minifundist tobacco household.

Transactions between dealers and manufacturers are preceded by tobacco samples sent by the exporters to the manufacturers. The most common requirements expected from Dominican dark tobacco are low content of nicotine and residues of clorhine insecticides, lesser degree of humidity and standard graduation and packing. If the sample is accepted the manufacturer will pay 75 to 80% of the value and the rest upon receiving and inspecting the shipment; as previously said, 90 to 180 days of credit might be approved.

Operations are made upon two bases. The first is mutual confidence. If the suppliers should deliver a tobacco shipment not corresponding to the sample, the manufacturer will not order any more tobacco from him. Secondly, there are no contracts for more than one season. The rationale is that manufacturers prefer to select from year to year the best crops and take advantage of better commercial conditions. This is not to say that manufacturers change from suppliers every season, but only that they prefer to maintain their purchasing freedom. As a matter of fact, manufacturers are very slow to change suppliers since the tobacco obtained through them affects the blend characterizing their finished product upon which their final sales are contingent. Therefore, manufacturers normally

offer purchasing "preference" to their traditional suppliers and thereby new market penetrations are difficult. They further protect themselves by keeping stocks of tobacco for an average of 24 months.

The practice of only offering suppliers a purchasing preference over other dealer's tobacco increases the risk involved in the dealings of the casas matrices. All of their operations are normally done on an estimated basis. At the same time the difficulty of penetrating new markets, just because of this transactional custom, influences the behavior of the dealers. They are always prompt to supply any order received regardless of local prices and possible losses. Only by satisfying a manufacturer will they keep their market sales and establish bonds of trust and cooperation with buyers.

Tobacco sale price is usually agreed to in U.S. dollars according to weight measures of 100 kilos if exported to Europe, or of 100 pounds if sent to the United States. In the last season, because of the dollar devaluation, sales were approved in other European currencies. During sale transactions the relations between the manufacturers and the export houses are limited to letter exchanges. On some occasions however, manufacturers send representatives to inspect the tobacco harvest and warehouse manipulation. During fieldwork, two such representatives seemed to be as well informed of Dominican tobacco production, yields, and cost as any export house president.

If the export house sells his tobacco directly to the manufacturer, then an average of 3.5 to 7% of the selling price of the 100 kilos of tobacco will normally account for the exporters' profit margin. On the other hand, this profit increases to an average of 6 to 13% if the sale is done through an international dealer house. In all cases, export transportation costs are taken care of by the buyers. Examining the profit margins, it becomes evident that the strategy of both the independent exporters and international dealers, resides in bulk transactions of better quality tobacco in order to increase their relatively

TABLE 33

AVERAGE SALE PRICE OF THE DOMINICAN TOBACCO AT THE INTERNATIONAL MARKET 1963-1970

COUNTRIES	1963	1964	1965	1966	1967	1968	1969	1970
GENERAL AVERAGE	26.34	29.46	32.64	26.08	26.64	35.42	36.29	36.52
AVERAGE IN AMERICA	38.02	37.81	70.40	50.65	42.19	45.80	47.23	47.99
Canada	29.32	23.20	---	---	54.25	---	---	37.86
Chile	25.00	---	---	41.51	34.34	---	111.03	111.79
United States	38.28	35.13	92.77	51.34	50.27	54.39	50.54	50.82
Puerto Rico	37.80	41.81	50.18	---	34.36	38.03	39.63	39.47
Haiti	---	---	---	---	---	50.49	---	---
Jamaica	---	---	---	---	---	148.65	153.04	---
Uruguay	---	26.38	---	---	33.22	48.33	40.80	48.50
Venezuela	---	83.92	---	85.80	86.02	19.36	269.93	---
AVERAGE IN EUROPE	23.12	24.02	27.60	25.63	23.61	32.02	33.01	33.70
Germany	24.19	24.15	26.04	22.21	22.88	24.91	29.19	33.31
Belgium	26.74	32.54	33.14	34.06	31.78	37.58	41.05	45.07
Denmark	29.68	38.03	41.93	32.51	32.42	40.82	38.17	38.44
Spain	20.81	21.70	20.45	19.58	18.29	30.97	23.93	30.95
Canary Islands	24.97	25.13	26.59	24.26	23.92	32.35	34.34	33.98
Azores Islands	49.94	---	42.49	34.00	---	---	---	---
Holland	23.23	22.05	29.85	25.54	25.20	32.03	32.50	34.45
Finland	---	---	---	30.13	---	---	---	---
France	21.04	19.02	26.47	---	---	---	---	---
Great Britain	18.39	36.03	---	---	---	---	---	---
Italy	---	32.97	---	---	---	---	---	---
Portugal	32.03	27.65	---	30.53	---	---	38.71	35.00
Switzerland	---	25.06	---	---	---	---	---	---
AVERAGE IN AFRICA	24.25	21.46	23.86	20.69	21.64	30.77	28.11	31.65
AVERAGE IN ASIA	30.73	---	---	---	---	40.51	---	---

Source: Unpublished data from the Tobacco Institute. Price for 50 kilos in RD\$.

low profit percentage. As a matter of fact, during our research some export houses seemed to remain in the tobacco business not so much because of profit maximization that competition had reduced sharply in the last years, but as a way of life (if covering costs) and to maintain their costly initial investments and organizations. On the other hand, interviews are indicative of a trend by which small dealer houses have been assimilated by more powerful and large-scale dealers.

Normally, dealer houses will keep track of manufacturers' needs through a network of brokers earning from 3 to 5% of each final sale they arrange. These brokers are frequently in close contact with manufacturers and maintain a personal relationship. These are of strategic importance. Interviews reveal that sometimes sale transactions have to be arranged through these brokers because of their relationships with the manufacturer. Brokers normally operate in one country and for one dealer house exclusively; when the tobacco season is over they will probably market other products. At no time do they have access to the tobacco or to the money accounting for the payments. Only in this respect does their role differ from that of countryside tobacco middlemen. In some instances, independent and semi-independent export houses are able to obtain the services of some of these dealers and thus directly keep track of the demands of manufacturers. Cases have been reported in which personal considerations have influenced the lowering of the broker's profit to even 2% of the final sale.

In any case the role of the brokers under present day organization of the tobacco industry remains essential since they inform suppliers of new markets and their possible demands. At the same time through their personal relations with manufacturers they secure buyers to the former's tobacco.

CHAPTER VII

THE SOCIAL ORGANIZATION OF POWER

Tobacco Eco-market System

In supplying Dominican dark tobacco to manufacturers a complex organization of exchange is necessary. Through it tobacco flows from the peasant's plot to the international buyers with the intervention of the middleman, local packer and the export house. Two significant features are characteristic of the operations of these units.

First, the adaptational networks of the units are united by the flow of one common energy resource. In other words, the vehicle connecting the adaptational networks of these units is a common "articulating energy resource", tobacco. The more dependent any unit is upon tobacco transactions to procure its ecological adaptation, the more vital this energy resource becomes to it. They might or might not be exclusively adapted to one articulating energy resource. But as long as they are accountable for the flow of tobacco from one level of articulation to the other, this commodity is an articulating energy resource.

Imbedded in this feature is a distinction between specialized and diversified adaptation. For instance, a peasant with a farm of 55 tareas seeded with criollo tobacco is more dependent upon the tobacco market prices than another one with 25 tareas of tobacco and 30 tareas of secondary crops. In the same way, international dealers normally purchase and market in addition to tobacco other crops such as coffee and cocoa. Regardless of the adaptational value of this strategy, their environmental control seems to be less contingent upon tobacco transactions than if they were dealing with only one articulating

energy resources.

The second operational aspect of these units is the integration of a technoeconomic organization beyond the adaptational network of any one single unit or any one single level of articulation. No adaptational network within this technoeconomic organization is isolated or self-supporting. The degree of dependence of any one single unit upon the adaptational operations of the others varies and is open to specific study according to a quantifiable model of power reciprocities presented earlier in this work. The fact remains, however, that the units are mutually dependent in order to guarantee the flow of the tobacco.

Not only is a distinction of specialized versus diversified adaptation again relevant but we also find the problem of complexity and environmental overlapping. For instance, a criollo tobacco minifundist peasant not only has to worry about climatic conditions affecting his crop, but with tobacco market prices, market transactions, and production credits as well. Prices fluctuate according to market conditions of supply and demand analyzed by international dealers and export houses. Market transactions are contingent upon relations with producer organizations, inner-adaptational network and social activities. Production credits depend upon the private policy of export houses through local warehouses and the official policies of the national government as well as upon community contacts with money lenders and store house owners. As a result, the peasant is exposed to what might be called a "broken environment". In it a number of units interact, many from different levels of articulation, conditioning his adaptation beyond expected natural environment and community conditions.

The technoeconomic organization involving the exchange networks of tobacco for other energy resources forms what we shall call an eco-market system. An eco-market system is a complex distributive system of energy resources articulated through a series of levels and organized through the adaptational networks of the different operating units. It accomplishes two main functions.

first, by means of this technoeconomic mechanism of industrial complex societies, articulating energy resources are harnessed, transformed and distributed for future consumption by specific units in the society. Secondly, the eco-market system protects the flow of various other energy resources of strategic importance for the ecological adaptation of the units within the system.

The term "eco-market system" has been elaborated and receives its meaning from two previously employed concepts in the anthropological literature: eco-system and market system. As frequently employed in cultural anthropology the term ecology refers to three levels of relationship of man to his environment. first, to the relationship of a human community to its inorganic environment. secondly, to the human community relationship to the plants and animals that it depends on. Thirdly, the interrelationships between human beings within an organized social system and between human communities. Since human behavior is primarily cultural behavior, ecology is referred to in anthropology as cultural ecology. Briefly then, from a cultural ecologist perspective the culture of a social unit appears as a system in process in interaction with other systems; for instance, the biotic system. The key to understanding the developmental process of the cultural system lies in this interactive relationship. The total network of relationships between the systems is known as ecological system or eco-system.

The second concept here re-elaborated is Polanyi's market system previously discussed in the Introduction to this work. Its employment tries to emphasize the fact that the eco-system of operating units in contemporary industrial societies is articulated by specific market relations. Polanyi (1968:32-35) convincingly argues that it was not the coming of the machine as such, but the invention of elaborate and therefore specific machinery and plant that completely changed the relationship of the merchant to production. The use of elaborate technology involved the development of the factory system.

Industrial production ceased to be an accessory of commerce organized by merchants as a buying and selling proposition. Now it includes long term investments with corresponding risks. Thus, unless the continuance of production is reasonably assured, such a risk is not bearable. The fiction in regard to such "commodities" as labor (human activity), land (nature) and money (a token of purchasing power which comes into being through the mechanism of banking or state finance), supplies a vital organizing principle in regard to the whole society. It affects the whole society because no social arrangement is allowed to exist that might prevent the actual functioning of the market mechanism of buying and selling contingent upon the priced flow of these non-commodities.

The tobacco eco-market system has been defined in relation to the exchange through which an articulating energy resource is harnessed as a raw product and successively transformed until it is ready for consumption. It should be noted, however, that after the final tobacco products are manufactured a new process starts. Industrial manufacturers supply and depend upon local distributors and commercial houses to market their final products to the public at large. The commercial level of articulation as well as the manufacturing level of the tobacco eco-market system were not studied during field work for two main reasons. First, time was not sufficient in order to conduct this research. Second, the manufacturing and commercial levels of articulation take place outside the Dominican Republic in Europe and the United States. Hopefully, future research will fill the gap and determine these phases of the flow of the commodity to be the last two stages of the tobacco eco-market system.

The Tobacco Eco-market System: A Segmentary Organization?

A segment is, generically, one of an indefinite number of parts comprising a whole in which one part is like another in structure or composition and function. It also refers to the common process of growth by division into equivalent

parts. The tobacco eco-market system resembles in its functional organization at each level of articulation the segmentation studied by Sahlins at the tribal level of sociocultural integration (1961).

In his study, Sahlins expanded the concept of habitat to include the presence or absence of neighboring tribal groups. According to him, a tribe is a segmented organization. It is composed of a number of equivalent, unspecialized, multifamily groups, each the structural duplicate of the other. Each segment, composed by a collection of kinship and residential units, not merely patrilocal bands, is economically as well as politically autonomous. Segmentation then is studied as an adaptation to specific pressures faced by the Tiv and the Nuer tribes. It refers to the fact that each segment of a tribal society is an autonomous replica of all the others, without centralization of control. This replication denotes numbers of people which can vary greatly in each of the segments. The adaptive advantage of the segmentary lineage is the form taken by a tribal society when it settles in an area previously inhabited by other groups. But if there is not pressure to establish a confederated defense or offense against neighboring tribes, there will be little inclination on the part of the segments to unite.

If the Tiv-Nuer segmentary lineage is a "political machine", the eco-market system is a technoeconomic adaptive form. It guarantees the flow of energy resources in an industrial complex society between heterogeneous environments achieving a stage of organic solidarity regardless of patterns of conflict. The principal selective pressures associated with the origin of the tobacco eco-market system are: first, the more extensive technical ability of industrial societies in contrast to hunting and gathering, tribe, chiefdom, and pristine state sociocultural systems. This is specifically true in relation to the technological refinement of industrial societies and the division of labor it requires coordinated by centers of control and of role specialization. Secondly,

we find the complexity of the distributive system common to complex societies where producing and consuming units do not necessarily coincide. Thirdly, the geographical mobility within and between contemporary societies augments the range of contact and exchange of any particular group, city or state beyond its own frontier. Fourthly, the market economic system under which commodity transactions take place in industrial societies emphasizing the accumulation of capital, financier investments, and monetary equivalencies.

At first sight, the differences between a tribal segmentary lineage as defined by Sahlins and the tobacco eco-market system seem overwhelming. The tobacco system is not politically or economically autonomous. It operates within a wider societal environment and under specific regulations of various independent states. In addition, each level of articulation is not the replica of the other. Especially, when analyzed in terms of scale of operations, environmental control and adaptational specialization. Whether or not the tobacco eco-market system as a unit is the replica of other operating market systems in industrial societies will have to be decided by future comparative studies. In any case, the differences between the tribal segmentary lineage and the eco-market system seem to result from their different adaptations: to a tribal and to an industrial level of sociocultural integration. This adaptational difference also accounts for their contrasting mechanical and organic solidarity.

Regardless of the previous differences, the structural operations within each level of articulation of the tobacco eco-market system are analogous. The differences in scale of operations of the different units at the various levels of articulation reveal functional operations recurrent throughout the eco-market system, especially, in relation to the conditioning imposed upon them by market based transactions. These similarities are so basic that they suggest this technoeconomic organization as a segmentary adaptive mechanism characteristic of industrial complex societies.

The present discussion does not intend to argue whether or not eco-market systems are segmentary organizations. It only wants to acknowledge the possible taxonomic precedent of the tobacco eco-market system in an evolutionary perspective. Some of the structural similarities recurring at each level of articulation and conditioning the ecological adaptation of the units within the system will be considered in the following subsections. But the scope of the argument will be wider than mere structural similarities in the operations of the different operating units within the levels of articulation.

Adaptational Strategy

To be ecologically adapted is to be able to control and use the necessary environmental energy resources. These, by definition, are the means environmentally available for the subsistence, survival and expansion of the operating unit's existence. The success or failure of the adaptational process is determined by the cultural perception of the control and use of what Wolf has called "cultural necessities" (1966:6).

In industrial complex societies there are two characteristic features associated with the flow of energy resources: first, more energy resources are employed by the social units than is available in any single environment; secondly, access to society's energy resources is normally conditioned to a previous functional transformation of them through an "instrumental energy resource": liquid assets or just money. Under these conditions direct access to the energy resources is restricted on the part of the laboring units within society. Considerations of kinship, marriage rules and descent and residential units, formerly of prime causal importance to determine access to the group's energy resources are now substituted or conditioned by evaluations of legitimacy and labor outputs. The labor output of the units in their adaptational networks has then to be (i) valued and (ii) proportionally converted into the instrumental energy resources

of the society. After this process takes place the unit will exchange its instrumental energy resources for other resources being controlled, transformed and distributed by the cultural system.

The main task of the adaptational process of the units in the society is then to increase their bargaining power at the market place in order to control the necessary amount of instrumental resources which are to be converted into other energy resources. To achieve this goal the adaptational strategy of all units within the tobacco eco-market system consists in increasing the value of their operations in competition with the remaining units in the system.

The reason for this strategy lies in the fact that the value of their labor output is arbitrary; in other words, it is culturally determined. If they are able to increase their power base within the eco-market system the units will find themselves in a better position to determine the value of their operations to be then transacted for instrumental energy resources. The sign of this environmental exercise of power is related to their ability to control and determine the flow of tobacco through their intervention in the process of harnessing, transforming and distributing this commodity. By controlling the flow of tobacco they preserve or improve their position within the eco-market system. In addition, the units reinforce the value of their operations in the system.

Core Energy Resources

The control exercised upon the flow of tobacco in the eco-market system is contingent upon environmental power harnessed by the units and strategically employed within the system. Furthermore, the status and role of each operating unit (stratification) within the tobacco eco-market system is causally dependent upon its power resources.

The unit's power base in the system is obtained through the control of

"core energy resources". These are the strategic resources upon which the process of production, transformation and distribution of the articulating energy resource of the eco-market system is based: i.e., land or technology. By strategically utilizing and controlling core energy resources the units within the system are able to influence a fluctuating volume of energy. The larger the volume the greater will be the unit's power over the flow of tobacco in the system. At the core of the market transactions then lies an environmental power base contingent upon the unit's control of core energy resources.

The eco-market system is mainly the structure for the power manifested in the strategic employment of means of power according to marketing conditions. By harnessing control over the environmental core energy resources the intervening units strive to reinforce their power domains within the eco-market system and within society at large by controlling greater amounts of instrumental energy resources. At the same time, their power domain in the eco-market system will further reinforce their previous control over core energy resources. Thus a generalization summarizing the process of ecological adaptation within the tobacco eco-market system is as follows: Power over core energy resources generates control over the flow of articulating energy resources (tobacco). This increases the bargaining power over instrumental energy resources and further reinforces power over core energy resources.

The analysis of this proposition will be undertaken below to determine how control over core energy resources is obtained and the interaction of different forms of resources. But first some marginal considerations in the following two sub-sections are necessary.

Market Exchange

The exercise of power within the eco-market system is best exemplified in the structural mechanism through which the tobacco flows. The internal organization of the system is marked by power based transactions. These tran-

sactions have a market structure of exchange, i.e., supply and demand. Through it at least two energy resources flow: tobacco and liquid assets. A supplying unit offers on demand the tobacco under its control to a purchasing unit. The commodity is exchanged at public market price for a certain proportion of liquid assets controlled by the former unit. In this fashion tobacco will finally reach the manufacturers and the consuming public while a reallocation of liquid asset takes place.

The operating units do not exchange tobacco with the eco-market system as an entity. Within the system each operating unit articulates with another one in their market relations. Thus their adaptational networks are environmentally delimited with respect to the range and scale of their operations by their relations with specific limiting units.

The articulation taking place between the units at different levels and with assymetrical power bases manifest a patron-client structure. Variations do occur in the relations of international dealers and manufacturers from those of peasants and middlemen obviously. But in all cases the following characteristics seem to be present. First, the relations are established by units when "instrumental friendship" (see Wolf 1966b:16) reaches a maximum point of imbalance. This one unit is clearly superior to the other in its capacity to control the flow of tobacco in the system as well as of granting other goods and services. Secondly, the relations grow out of the need or mere desire to procure adaptational advantages. Thirdly, the relations are not patterned exclusively nor primarily upon objective norms of behavior but according to personal standards of confidence and trust. Fourthly, at the core of the relations there is an explicit principle of competition which seems to strive toward the leveling of inequalities.

Formal Elements of the Tobacco Eco-Market System

As previously discussed the most significant units within the tobacco eco-market system are:

At the production level of articulation: sharecroppers, minifundist peasants, and small-middle land owners. All of these run a household with lack of sufficient control over land and production credits. In addition, there are middle, entrepreneur, and big landowners who normally depend upon sharecroppers to run their under-exploited farms and estates.

At the middle level of articulation: middlemen articulate small scale producers with tobacco packers through their social networks and control of the local peasant social organization.

At the export level of articulation: warehouses and local packers directly secure the tobacco through their purchasing middlemen networks, and pack the leaves for overseas shipment. Export houses direct operations in their domains and control the flow of capital within the eco-market system. In direct contact with the former and frequently subsidizing their operations are the international dealer houses. They control access to final marketing of the raw tobacco leaves thereby securing access and control of the flow of capital and financial resources within the eco-market system. Finally, a level which has been included within the export level of articulation is that of the tobacco manufacturers. Concerned with the demands of the specific markets for their final products they purchase the tobacco from the dealers thus initiating the operations of the whole system.

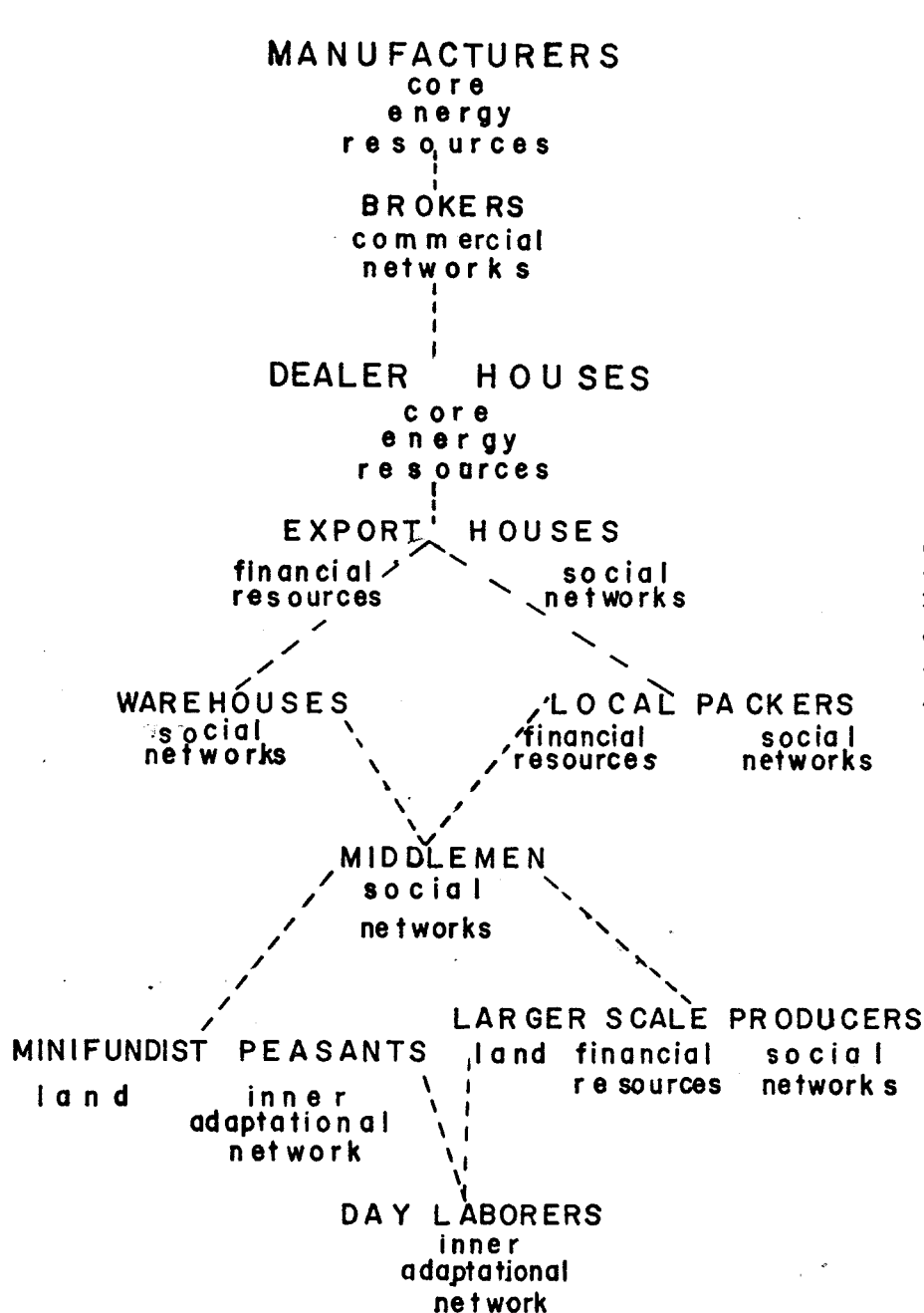
The operations of these units within the tobacco eco-market system are supported by the control achieved and preserved upon core energy resources. First, these are capital resources in the form of land, technology, financial resources, and other kinds of fixed capital. Secondly, these may be social networks in and outside the market place through which production and commercial operations occur. (See figure 1.) From the strategic interplay of these core energy resources the

level
of
articulation

OPERATING UNITS

flow of
energy
resources

PRODUCTION
MIDDLE
EXPORT



LIQUID ASSETS

TOBACCO

Figure 1 Tobacco Eco-market System

market power of the unit originates.

power Organization in the Tobacco Eco-market System

No operating unit in the tobacco eco-market system controls all these core energy resources. At least, not to the same degree. Normally, however, control over one of them extends access to other available core energy resources in the environment. A case in point, for instance, is that of the landed elite. Through their command over land they secure their adaptational network and guarantee not only loans and technological inputs in their estates if so desired, but also ascendancy over the local social networks.

Control over energy resources is not a sufficient guarantee of ecological adaptation. This process in the eco-market system is submitted to selective pressures of competition according to market rules. Thus inefficient employment of, or a critically limited access to, or both of the former alternatives, might hinder the adaptational chances of an operating unit within the system. An example of the second alternative is that of sharecroppers and minifundist producers. They are in control of reduced extensions of labor land and under deleterious labor arrangements. Thus they are unable to improve their financial standing and to capitalize sufficiently to meet cultural expectations. They maintain a process of adaptation characterized by its chronic indebtedness and dependence upon other power holding units in the society and the tobacco eco-market system.

The selective pressures determining the process of ecological adaptation are closely related to the strategic significance of the environmental core energy resources. The value of these resources is not necessarily fixed or standardized. In each level of articulation and in association with the operations taking place within it, the strategic value of these energy resources fluctuate. This seems to be the case with such core energy resources such as

land and technology. Nevertheless, still other resources are irreplaceable and their value seems to be standard regardless of the scale of operation of the units and their level of articulation. Such seems to be the case with financial resources and social networks.

An illustration of the differential relative importance of core resources is the case of land control. The significance of land resources is not identical for a middleman in his role of a tobacco buyer in comparison to a sharecropper or a minifundist peasant. In the same way, the operations of international dealer houses and exporters are not contingent upon the ownership of specific plots of land or even great extensions of land. As long as they are able to purchase the crop and do not have to protect large capital investments in processing machinery they seem to evade production responsibilities and control over the land. The same is true for tobacco manufacturers. But to producing units it is not so irrelevant whether or not they hold control over 10, 30, 150, 800 or 3500 tareas of land.

In the cultural perspective the strategic importance of financial resources is unique. At the core of all adaptational networks within the tobacco eco-market system is financial resources, either in the form of loans, production credits, advanced money, bank credits or the like. Access to and/or control over it is a condition sine qua non to the operations of all units within the system. Regardless of the unit or of the level of articulation, the tobacco eco-market system itself is contingent upon this single form of energy more than on any other for the maintenance of its operations. It is the medium by means of which one form of capital is transformed into another. Therefore, command over financial resources virtually become the most determinant variant in the power network of the system. Controlling and then providing access to its use is the main power strategy within the eco-market system.

Both small and large-scale operations within the tobacco eco-market

system require financial resources beyond the means of family financial pools. Thus there are three fundamental alternatives of getting the necessary form of capital: from a large foreign corporation, from a domestic corporation that will pool the resources of investors, or from the government which uses its taxing or borrowing power to acquire the funds and channel them through the Agricultural Bank and the Tobacco Institute. International corporations, banks and other financial organizations become necessary as a means of assembling and distributing funds and credits. This is especially when the state is not the exclusive investor as in a socialist country. In any case, the machinery of investment is a necessary counterpart of the operations within the tobacco eco-market system.

There exists a significant feedback relationship in the eco-market system between control over financial resources and control over other core energy resources, especially capital. Normally, the greater the power over financial resources the easier it becomes to control other forms of core energy resources, and vice versa. This relationship might be stated as follows: The degree of power of a unit upon financial resources is directly proportional to the unit's power base upon other environmental core energy resources.

For instance, let us consider the situation of minifundist peasants. Even when in control of their own plots they remain vulnerable to the strategem of financial powers. Normally, they are in need of production and household credits but their lack of capital resources further undermines their access to the former. Thus, although in possession of small plots, peasants are not able to be economically autonomous or to maintain independent control of their environments. This seems to be one of the critical reasons behind the failure of most land reform programs in Latin America in general: Land is granted to the peasant but his dependence circuit is not broken. He is not supported with financial, technical, and marketing assistance. This situation is further

aggravated when banks officially subsidized transact with these small-scale producers under a commercial pattern normally applied to bigger land holders and other agricultural and industrial investing units.

The flow both of liquid assets and therefore of capital resources in general into the tobacco eco-market system is basically related to the operations of international dealers and manufacturers. Their operations are contingent upon both the cultural valorization of tobacco by a consuming sector of society and the commercial phase of the final tobacco products. The reason behind this is that if no one were to consume the commodity, manufacturers obviously would not invest in the purchase and processing of the product. Since tobacco cannot be eaten, commercial production of it would be paralyzed. With this situation the flow of energy resources within the eco-market system would cease.

Although related, one factor accounts for the flow of these energy resources into the tobacco eco-market system and another one explains how capital is accumulated at certain levels and within the domain of specific operating units. As previously noted, there is a positive correlation between control over capital energy resources and domain over financial resources specifically. This situation in part encourages a concentration of environmental power in the hands of a few units within the system. In the normal process of adaptation, if not affected by other units outside the eco-market system (such as state control) the accumulation of energy resources is in the power network of some units to the exclusion and detriment of others.

This accumulation of energy resources is reflected in the power network within the eco-market system. As already seen, power is exercised by the units upon the flow of tobacco through their control over supply in conditions of market competition. But the control of supply is associated with the scale of operations of the units. The ability to extend the range of operations and

thereby the power of any one unit over other environments will generate a larger scale of operations. The goal is to articulate the operations of various adaptational networks plus having access to the flow of energy resources in those environments. This can be summarized by the following generalization: The degree of control over core energy resources is proportional to the scale of operation of the unit and to its control of supply within the eco-market system. The control of supply within the tobacco eco-market system, however, further reinforces the unit's accumulation of power within the system.

For example, export houses by financing local warehouses extend their influence into specific tobacco zones. As a rule, efficiency of operations remaining constant, the more local warehouses within the domain of the export packers the higher the volume of tobacco they control. It also follows that the higher the volume of tobacco controlled by the export house the lesser the power of any single warehouse in its transactions with the exporters. This then increases the exporter's power base in dealing with international dealers.

Because of the close association between scale of operation and control of supply on the one hand, and power over core energy resources on the other, the phenomena of capital accumulation frequently becomes a political affair. There is normally an accumulation and transmission of power at the same levels of articulation and between the same operating units. Power becomes self-perpetuating in the system; it establishes a way of life for the operating units which is handed on from generation to generation and normally along family lines. The structure of power resulting from the endogamous nature of power hinders the adaptational opportunities of other units in the system.

A state of dependency of some units under the power domain of others and maintained through patron-client relations is evident within the system. This contingency is not related to the necessary functional interdependence of the unit's operations. Dependent units such as sharecroppers and minifundist peasants

in relation to the landed elite, or even exporters when related to international dealer houses, find themselves unable to control their own environments.

The crucial problem to solve in this perspective becomes: how can each operating unit maintain an independent and autonomous power base in its environment thus evading negative or unbalanced power exercised over them from the units in control of the eco-market system? Furthermore, how can the national government break the structure of power within the system to guarantee the independent operations and environmental control of the units in their respective environments?

These questions become still more crucial in view of the following dilemma facing small scale national units within the system. The scale of operation of any unit in the tobacco eco-market system is proportionally related to the proximity it maintains to the manufacturing level of articulation. In other words, the largest scale of operations is associated with tobacco manufacturers and international dealers and decreases proportionally as they remove themselves away from direct relationships with the formers.

The only apparent exception to this proposition seems to be the presence of middlemen above the production level of articulation. Their adaptational network, however, is contingent upon a minifundist tobacco production. Thus, the scale of operation of these middlemen has to be analyzed in relation to that of minifundist peasants and not in association with entrepreneur and the landed elite operations. As a matter of fact, all indications are that middlemen maintain a larger scale of operations than minifundist peasants and thus a more secure power base.

The articulation of the units at one level or another within the tobacco eco-market system is related to two social variables in addition to their control over capital energy resources. They are: the unit's social networks, and its control of environmental information. At this point it is relevant to note that the structural arrangements and the social networks in the tobacco eco-market

system become mutually contingent upon one another. Furthermore, the social networks underlie the access to and the accumulation of capital energy resources.

The organization of the tobacco eco-market system of the Dominican Republic is dependent upon social relations inside and outside the market place. These social networks might be commercially oriented and thus relatively transitory and not necessarily bounded in space or time, or very intensive and personalistic in orientation. Regardless of the characteristics of these social networks they increase the range of influence of the units beyond their own original environment. Without these social contacts and exchanges, each unit would be confined to its own kin relations. Thus each set of core energy resources --capital and social networks sustain each other.

As previously noted, social relations between different operating units take the form of patron-client relations in the eco-market system. This is especially apparent at the national sphere where objective criteria of efficiency and competence is mediated by person to person arrangements and personal loyalties. Operating units within the system are not only contingent upon their ascribed statuses because of kin affiliation, their operations are restricted beyond any possibility of achievement (by corporate or private enterprise) through ranges of social influence dependent upon patron-client structures. Structured according to a criterium of fidelity to the patrons, these relations confine mobility from one level of articulation to another within the system. In addition, patron-client relations provide an organizational pattern of social exchanges between operating units and guarantee social contacts to take place beyond objective role qualifications. Therefore, any enterprise within the tobacco eco-market system is limited to those known and trusted by the units on a personal basis and roles become restricted and ascribed to closed groups. Mobility of personnel characteristic of industrial economies does not seem to hinder patron-client associations in the system.

It might be noted that if large capital investments were ever to take place on the part of tobacco manufacturers or international dealers with its consequent elimination of a minifundist production, then this situation will probably change. The protection of capital will require a new social organization within the system causing structural changes at the production and middlemen level of articulation. This rearrangement will modify the present nature of the social networks built upon the operations of independent units. In any case, the fact remains that today, even behind the "preferential" relations determining the transactions of manufacturers and their suppliers of tobacco, adaptational operations are contingent upon criteria of personalism between independent patrons and clients in this stratified distributive system.

These social networks are closely related to the flow of information within the eco-market system. Through these social relations the units have access to environmental information outside their original range of operations. This information permits the mapping of various environments to the exchanging units. When the social relations are maintained between units in the same power domain, the flow of information is normally uni-directional. The information flows to the more powerful unit controlling the relations. This communication network guarantees a feedback process to the units extending their adaptational network. Through it their power base is further secured and their exercise of power becomes more effective.

It is highly significant, for instance, that while peasants do not know of exporter's operations, the latter have a mapped environment of the former's production activities. In the same way, exporters through their contacts with warehouses know of market conditions within the middlemen level of articulation; but the contrary is not true. The same observation might be made in relation to international dealer houses transacting with exporters about the latter's domain, or to manufacturers' control of information of the operations and

organization of the eco-market system as a unit.

At this point then we contend that power is going to be not only the effective control that one operating unit holds over the environmental resources of another unit, but that this "effective control" of any unit's environment is related to the control of information about its environment. Power exercise, then, is contingent upon the ability of a unit to become ecologically adapted in relation to its environmental information. Thus the units within the tobacco eco-market system are dependent upon an informational feedback process obtained through their social networks to direct their power based operations.

Summary

It seems appropriate to conclude that the structure of power within the tobacco eco-market system is contingent upon three features. First, the scale of operations of the operating unit and thus its control of supply within the system. Secondly, operational information within the system further related to control and access to environmental core energy resources. Finally, social networks and capital resources as here defined, especially capital in the form of financial resources, are the most significant and universally valued core energy resources to gain control over the flow of tobacco within its eco-market system. The latter's technoeconomic organization is the "playground" for power based transactions to gain access to instrumental energy resources.

These conclusions have been presented in a set of propositions above. For reasons of clarity they are listed below.

(1) The technoeconomic organization resulting from the exchange networks of tobacco for other energy resources is an eco-market system. This we have defined as a complex distributive system of articulating energy resources through a series of levels of articulation and organized by the adaptational networks of different operating units.

(2) The status and role of each operating unit within the tobacco eco-market system is functionally dependent upon its power resources.

(3) The task of the adaptational process of operating units in industrial complex societies is to increase its bargaining power at the market place in order to control the necessary amount of instrumental resources which are to be converted into other energy resources.

(3a) The adaptational strategy of all units within the tobacco eco-market system is to increase the value of their operations in competition with the remaining units in the system. This they are able to achieve by controlling and determining the flow of the articulating energy resource of the system.

(4) In order to understand the marketing process within the tobacco eco-market system three energy resources can be distinguished: (i) instrumental energy resources (liquid assets); (ii) articulating energy resources (tobacco); (iii) core energy resources: capital (land, technology, financial resources, and other forms of fixed capital), and social networks.

(5) The process of ecological adaptation within the tobacco eco-market system is summarized as follows. Power over core energy resources generates control over the flow of articulating energy resources (tobacco). This increases the bargaining power over instrumental energy resources and further reinforces power over core energy resources.

(6) This exercise of power over core energy resources is summarized by the following proposition: The degree of power of a unit upon financial resources is directly proportional to the unit's power base upon other environmental forms of core energy resources.

(7) The accumulation of energy resources in the range of operations of specific units is summarized by the following proposition: The degree of control over core energy resources is proportional to the scale of operation of the unit and to its control of supply within the eco-market system. But the control of

supply within the system further reinforces the unit's accumulation of power within the eco-market system.

(8) The scale of operation of any unit within the tobacco eco-market system is proportionally related to the proximity they maintain to the manufacturing level of articulation.

(9) The articulation of the units at one level or another within the tobacco eco-market system is related to two social variables in addition to their control over capital energy resources. They are: (1) the unit's social networks which normally are of the patron-client form, and (2) their control of environmental information upon which the efficient exercise of power is contingent in the system

Industrial Complex Societies and Eco-Market Systems

Before concluding, a number of questions seem pertinent to suggest possible trends of future research. The most crucial one of these deals with the representativeness of the tobacco eco-market system in relation to other technoeconomic organizations in industrial complex societies. Future research could examine the following question cross-culturally: Is the technoeconomic sub-system of industrial complex societies articulated by a number of eco-market systems which define the flow of energy resources in the society? Hopefully, the use of the comparative method in answering this question will contribute to better place the eco-market system organization in an evolutionary perspective and contribute to determine its regularities and cultural effects.

The study of other articulating energy resources should try also to determine the organization of their eco-market systems as well as to establish significant parallelisms with the tobacco eco-market system. In these researches special importance has to be given to more complex eco-market systems. For instance, the one of the automobile or the oil industry. These more complex

systems provide a market for a number of other eco-marketing systems thus increasing their power base in the society at large.

From the point of view of the social structure, special interest should be given to whether or not units adapted to corresponding levels of articulation and with similar power bases in different eco-market systems constitute a sub-culture of society. This line of research will illuminate the relationships existing between the technoeconomic organization of society and its social structure. Specifically, it will contribute to the understanding of such concepts as "the culture of poverty", "ghettos", "masses", and "elites". This approach of research will hopefully provide a holistic view of industrial complex societies.

Another set of questions in need of being answered is the role of the state and other service organizations in industrial societies. Using a graphic image, the eco-market system articulates the labor market of society vertically at different levels of articulation and with different scales of operation. Meanwhile, the state and other service organizations (the Church, the military, etc.) provide a horizontal inter-locking of society. They serve as a vehicle of union to the operations of different eco-market systems. In addition, they procure to articulate the composing units of these eco-market systems to a wider cultural frame of reference and of action beyond the technoeconomic subsystem itself. The power base of these horizontal inter-locking systems is another important ground for future analysis, especially in correlation with their exchanges with eco-market systems.

Finally, future research will have to take the problem of a typology of energy resources both for eco-market systems and for inter-locking systems in industrial complex societies. Concretely, this typology needs to be further elaborated from the one here presented. The importance of this line of inquiry being that human societies do not seem to rely upon a single energy resource;

or in the case of industrial complex societies, upon a single set of these energy resources. The problem then consists in analyzing the strategic importance of the various articulating and core energy resources in industrial complex societies to determine their influence upon the organization of the latter. The result of these studies should provide a closer understanding of power within and between contemporary societies.

APPENDIX

Field Research

The field work which resulted in the present study took place from June 2 to September 16, 1972. Once in the field two main handicaps pressured the actual conduct of the investigation: available time and funds plus lack of prior knowledge on the subject matter. I had read how Anthropologists feel lost in their first field experience. But during the last week of May, I remember myself sitting at the monument to the National Restoration in Santiago City, and thinking that none of those reports did justice to the sense of disorientation that I was then experiencing. In fact, at the time I started to think that the whole enterprise was impossible. I was an explorer with a theoretical map in his hands but unable to find a compass to put him on the road.

Since early 1972, I started to plan the research. The main goal at the time was to conduct an ethnography on the structure of power in the Cibao community of Gurabo with which I had previous contacts. But once in Gurabo the four months of actual field time proved this project to be out of reach.

It was then that the idea of studying the organization of power in the tobacco production and exportation was born with the help of Dr. Ken Sharpe. The intention was frankly exploratory, and there was no detailed research to follow or desire to test pre-conceived hypothesis or theoretical models. Myself and the few assistants I had at the time were all too young and inexperienced to have calculated the dimensions of the enterprise we were ready to start. Mainly for this reason, the present work is preliminary in nature. Merton would refer to it as a "post-factum sociological interpretation" of the field data. And in

fact he would have been correct even in reference to most of the material in the first chapter. Such explanations, Merton would theoretically add, "remain at the level of plausability rather than leading to compelling evidence... The documentary evidence merely illustrates rather than tests the theory" (1957:93ss). This final statement could be argued (cf. Liebow 1967:10-12; Becker 1958; Gans 1962). But evading epistemological questions at the time, I will agree with Merton with the hope that the degree of probability behind the hypothetical model of power and of the technoeconomic organization in industrial complex societies here developed stimulates future research on these problems.

The discovery of the existence of the different units operating in the tobacco eco-market system was, in large part, through accident. During the first four to five weeks of fieldwork the field diary reveals day after day, new operations and new persons appearing in the environment. One interview lead to another just as one operation seemed to justify the following. Gradually the whole system became a unit in itself and surprisingly familiar; as a matter of fact, its original complexity seemed at the end all but natural and expectable. Nevertheless, before that moment came, more than a dozen instances of almost despair had to be endured.

Two problems are crucial in any research: the selection of the units of study, and their representativeness. The former question, as far as it was also a geographical problem did not prove to be difficult to solve. The historical record, common knowledge and present day national statistics all clearly identified the Cibao region as tobacco country. In addition, the 1971 sixth national agricultural census indicated the province of Santiago as the core of this industry.

Guided then by the results of the agricultural census (at the time still being counted in a Santiago office in the old municipal building, by early field interviews in some of the export houses with which I had previous personal contacts, and by studying the area of operations of almost all export houses and the

Tobacco Institute, a number of concrete communities were then selected for specific and intensive study. They were: Gurabo, Pontezuela, Jacagua, Tamboril, Licey, the western region of Moca, Cutupu, San Jose de las Matas, Villa Gonzalez, El Ingenio and Janico. Not all of these tobacco zones were significant for the same reasons. For instance, in Villa Gonzalez and El Ingenio great landholdings predominate with production of Cuban and olor tobacco. In addition, the former has a number of local packers but no export house warehouses. In Moca, Tamboril and San Jose de las Matas, on the other hand, minifundist peasants grow criollo tobacco and there is a considerable number of local warehouses. While Tamboril, Jacagua and Villa Gonzalez are traditionally tobacco zones, San Jose de las Matas and Cutupu are not. Regretfully, new tobacco zones as Dajabon and San Critobal were not even visited. Other communities like La Torre, Cotui and La Canela were sporadically visited, and some casual interviews were conducted there as a technique of control.

In order to cover this territory the following arrangement was achieved: I was to make contact with either a group of peasants, of middlemen or a warehouse in each zone. Normally I was introduced to peasants by peasants, to middlemen by middlemen, and to warehouses by export houses. In each zone I freely labored in the capacity of the group under study according to the participant-observation technique. This observation took place while conducting the same labor activities that the units under study would normally conduct. Through this strategy I was able to: First, obtain direct experience of labor conditions and market strategies. Secondly, establish rapport with my informants and community persons at large. Thirdly, introduce myself in the community as a student interested in learning about their daily life by participating in it.

I did not follow a rigid time schedule, but moved from one community to the other, and from one category of labor to the other, depending on circumstances. Surprisingly, no major opposition or even suspicion was encountered.

When bulking and hampering tobacco in a peasant's shading house, when purchasing the crop or when working in a warehouse, I was expected to labor as any other one in the group without any privileges. First moment curiosity aroused by my presence normally disappeared when it was noticed that I mastered the Spanish, was a student looking for new experiences; was not telling anyone what to do or how to do it, and was interested in their living conditions and adaptational strategies.

I would have to guess at this time that my physical appearance was one of the main reasons why I was not considered to be a political informant (calie) sent to them. Furthermore, it seems to me in retrospect that the fact that I labored hand in hand with them was a point in favor of establishing rapport with everyone regardless of my national and social precedence. In addition, while in a place I tried to accomodate my own standard conditions of living to those of my host's. This experience of entering into the world of these peasants, middlemen and warehouse laborers and managers, was the most rewarding experience of all. It lasted throughout the fieldwork with the exception of two weeks.

In only one community this pattern of data gathering was not followed. In Cutupu I stayed four days only, and during that period of time I relied heavily on the Catholic parish priest to introduce me to minifundist peasants. I have to acknowledge that his services were valuable, and his expertise "in the field" most revealing.

From the methodological point of view, the value of the short one to three weeks labor in different communities might be questioned. Obviously, they could not substitute for the intensive field work of one to two years in a community. Nevertheless, it should be remembered that the objective of the study was not community nor value oriented. I was interested in a synchronic region wide view of the operations of a technoeconomic organization.

The data was collected mainly through participant observation as already

mentioned. But in addition, something like an information network of 17 peasants, middlemen and employees of warehouses and export packers was formed. The original group was of 21. In some cases this arrangement has worked very efficiently up to the time in which this report is being written. They served as field assistants in the full sense of the word and permitted me to widen the range of operations considerably as well as to cherish their friendship. Twelve of them had only grammar school, and only two had finished high school, none had college training. None of them received special training beyond precise instructions on what to look for and, if possible, to report it back to me. They were specifically instructed to ignore any "confidential" information for we were not establishing any secret eliciting operation. I have to confess that their knowledge of the operations of which they are part proved to be a great asset to the information I received from them. The services and the intelligence of these anonymous peasants, laborers and employees is a significant proof of their responsibility, initiative and labor. None of those involved in this quasi-group was paid or worked beyond their customary range of operations.

During field work a questionnaire consisting of ten problem solving questions was constructed with the cooperation of three of the above mentioned assistants. Some of the results are presented in chapters four and five. The object of the questions was to obtain a larger sample in some crucial matters. It was administered by the three persons just mentioned and myself. At the beginning we thought of putting it on paper and distributing it, but the literacy factor recommended the other option. The questions were verbally read to the randomly selected interviewed persons and then reported back by the interviewer on his own record sheet. It was not possible to apply the questionnaire in all communities under study because of time pressures and some technical difficulties.

In addition to this technique, open questionnaires were constructed for specific informants in each category of labor with the assistance of five other

field assistants of the original assistant group previously mentioned. These interviews with more than 45 informants, tried to explore the informants' work histories, their geographical and social mobility, wealth and property, associations and affiliations, kinship and friendship social networks. Normally the informants were interviewed more than three times during fieldwork and always under informal conditions. Frequently the interviews took place while at work in the field so that every question would be introduced casually and growing out of the activities of the moment.

It was obvious from the outset that if legitimate comparisons between the informants were to be made, that the data involved would have to be collected under rigorously standardized circumstances and that further, these data must be at least minimally quantifiable. As all anthropologists are acutely aware, satisfying such conditions in field research is difficult in the extreme. However, following a series of conferences between field assistants and consultation with persons skilled in sundry interviewing, an interviewing program was decided upon that, with luck, had a chance of being successful.

The interviews with four exceptions were conducted by myself. At the beginning the use of a tape recorder was planned. But soon it proved to be an ill-thought idea. Especially peasants and middlemen seemed afraid of it and it even increased suspicion as if it were a matter of forcing them to say something while maintaining a record of it. Besides, it proved to be quite difficult to be carrying a tape recorder while at work. For these reasons, their answers were recorded in small notebooks like the ones normally used by middlemen to keep track of their operations. Use of the memory proved to be a great asset under the circumstances.

The informants who participated in these open interviews were normally randomly selected. The relationships to be established were reinforced by circumstantial variables. For instance, the informant's ability as a "good"

informant, the rapport existing between us and the physical accessibility to them. In over all, these informants proved to be a most valuable source of information about daily family and labor life. The interviews themselves were conducted without conspicuous evasion or withholding of information.

The study of big land estates, local packers and export houses was done by means of interviews and special visits to the places. The factors behind the selection of these informants are mixed in nature: at times they were selected randomly, at others by pure accident, and still others were determined by circumstances. For instance, ten export houses were initially visited. Of these two had to be discarded because of absolute lack of cooperation. In all, however, the interviews with export houses were conducted in an atmosphere of friendliness and mutual curiosity. Not all questions were answered, but more than was initially expected. As a matter of fact, in four of these export houses, cooperation was significantly open. The same generalization is valid for big tobacco landholders and local packers.

The interviews with the members of these units were more formal in nature than the ones with peasants and middlemen, but still basically informal and unstructured. I tried to present the same outline of questions to all of them according to the type of their operations. Their questions ranged from social life to business operations, and from their perception of peasants and middlemen to the European market, tobacco manufacturers, and international dealers. On some occasions the tape recorder was employed in these interviews. Nevertheless, the norm was to use a notebook. As in the case of the peasants, the tape recorder gave an air of formality and gravity to the interview that seemed to inhibit the conversation rather than to facilitate it.

The interviews with presidents and officials of export houses, of local packers or with agricultural entrepreneurs and big landholders were normally conducted in their offices or houses, and lasted from one to three hours. To

conduct one of these interviews I had to prepare a set of specific topics to discuss with them. In addition, I normally had to leave the peasant community in which I was working at the time, take a shower, change clothes and go into "another world". I have to admit that this minicultural shock was most significant in enlarging the perspective of the study and in understanding the complexity of the problems under consideration.

My primary informants, either at the peasant communities or at the local packers and export houses, are distinguished from other persons who provided me with information on the basis of the purposes of my relationship with them (research) and the time devoted to the relationship. And even in these circumstances I should acknowledge that lasting and profound friendships were originated within these relationships.

Earlier it was mentioned that one of the main problems in a fieldwork is the representativeness of the units of the analysis. The problem of sampling or representativeness is familiar to anthropologists. How representative are the responses of the informants? How much important information is lost when it is impossible to deal with a statistically representative sector of the population studied? Facing similar questions Plotnicov responded: "There is little that ethnographers can do to compensate for such possible data lacunae and the biases of selected informants that may together skew analysis and interpretation. This is the region where ethnographic field work partakes of common sense and art as much as scientific methodology. Merely to attempt a comprehensive ethnographic description of a society would require a company of researchers with unlimited time and funds" (1967:26; cf. Gulliver 1965:97).

Obviously the problem of sampling is a vital one. It is my personal belief that anthropology should not depart from common sense and art in its attempt to outline the significant areas of social interaction. But this objective should not be an excuse to evade the conventional norms of scientific

methodology. In a way the original idea was to intermix "bones and flesh": extensive questionnaire techniques and statistical treatment of the data with participant-observation and intensive field interviews. As it turned out this goal was unobtainable. My personal inexperience and also probably insufficient time and funds, undermined the full employment of the questionnaires and of more sophisticated statistical techniques. But at no moment the reason for this omission was the "impersonal flavor" of questionnaires.

For these reasons, I sincerely hope that the results of this work be turned into an hypothetical questionmark and that further research will try to prove its regionwide representativeness and the theoretical value of the technoeconomic model of eco-market systems. As a matter of fact, this is an appeal to statistical handling of the data as well as inter-disciplinary "intersubjectivity". For the time being, however, this descriptive and interpretive material is considered to be applicable to the population sectors from which it was obtained and elaborated. It goes without saying that an ultimate test of a scientific method is its ability to yield results that can be replicated by independent investigators.

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APPROVAL SHEET

The thesis submitted by Fernando I. Ferran has been read and approved by members of the Department of Anthropology.

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

21 May 1973
Date

David X. H. M. S. J.
Signature of Advisor